Towards a Strategy Formulation Framework that Supports SME Survival and Growth

By

Hendrik Andries Snyman

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Supervisor: Mr Konrad Harald von Leipzig
Co-supervisor: Prof Cornelius Stephanus Lodewyk Schutte

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Declaration

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Abstract

Small- to medium-sized enterprises (SMEs) are critical to the socio-economic development of both developing and developed countries. Unfortunately, SMEs suffer from a high failure rate due to an inability to overcome their characteristic resource shortcomings and meet the necessary success criteria to execute effectively upon an opportunity.

Although theory suggests that SMEs could benefit from formal strategic efforts, with such processes assisting them in identifying their shortcomings and discovering alternative means of obtaining the necessary success factors to overcome these, evidence suggests that SMEs rarely engage in formal planning activities.

The lack of formal planning by SMEs is attributed to time constraints, or a fear that growth will change the family-like character of their business or upset their work life balance, as well as their belief that popular frameworks do not take into account their characteristic shortcomings and are geared primarily towards their larger corporate counterparts.

Authors agree with the belief of SMEs that popular frameworks are indeed biased towards their larger counterparts with the unique characteristics of SMEs preventing their direct application. However, the evidence also suggests that certain components of main-stream strategy theory are not only applicable but beneficial to SMEs.

With regard to the link between survival, growth and resources, the evidence suggests that the financial requirements to grow a business often extend beyond the resource base of the founders. Accordingly, the survival and growth of SMEs are linked to their ability to obtain external funding.

The objective of this study was to develop a formal strategy formulation framework, which takes into account the specific characteristics of SMEs and assists management in developing the means to obtain the necessary success factors to exploit an opportunity, as well as to improve their chances of gaining access to finance from venture capitalists, which are a subset of private investors who provide finance to new ventures and SMEs.

The research study adopted an action research paradigm because this supports the objective of the study of developing a practical tool, as well as the researcher's subjective ontological standpoint and the researcher's involvement in the research setting.

The study utilised systems thinking as the methodology to conduct this action research, as it supports the belief that knowledge and understanding of a phenomenon are best derived from building up a picture of the phenomenon and understanding the various interactions between the different components of the system.

The study thus utilised the systems engineering method to conduct the study, both because it supports grounded theory and framework building as a means to develop theory, and because it is also a fitting method for an industrial engineering doctorate, as it utilises an engineering driven method.

The study developed a set of requirements from the fields of SME survival and growth, strategy formation and strategy formulation, as well as venture capital, as guided by a set of sub-research questions and sub-objectives that support the main research question and objective.

In addition to the requirements derived from theory, the study developed additional design considerations by considering key words, concepts and phrases from the literature, and taking into account the scope of this study and its intended operating environment, as well as the use of the framework as a management tool.

In accordance with the systems engineering method, the study utilised concept mapping to categorise and draw connections from the functional requirements derived from the literature in order to synthesise the various domains, and developed sub-frameworks of understanding associated with the factors that affect SME survival and growth, strategy formation and formulation, and the alignment of these sub-frameworks with venture capital decision criteria.

With regard to the scope of the study, the dissertation developed upon the strategy formulation framework at increasing levels of detail, by first breaking it down into a set of

phases and later into various constituent stages, each with a singular requirement and objective coupled with key considerations to guide the user(s) through the strategy formulation process.

Despite the efforts of the framework to bring about understanding in an incremental fashion, the initial validation of the sub-frameworks, in the form of semi-structured interviews with domain experts, highlighted the complexity of the underlying theory. Accordingly, the final theoretical framework was translated into a practical framework by means of a metaphor and graphical illustrations.

The result of this study is a comprehensive framework for use by SMEs that, (1) synthesises the factors that influence their survival and growth, (2) facilitates strategy formation as the successful interplay between formal strategy formulation and continuous learning, and (3) assists strategy formulation, by bringing about the discovery of knowledge, the recognition of opportunities and success factors, and the identification of the alternative means to overcome obstacles to obtain the necessary success factors to effectively execute upon opportunities.

Opsomming

Klein en mediumondernemings (KMO's) is van kritieke belang vir die sosio-ekonomiese ontwikkeling van beide ontwikkelende en ontwikkelde lande. Ongelukkig is die mislukkingskoers van dié ondernemings baie hoog as gevolg van hul inherente onvermoë om hulpbron tekortkomings te oorkom en die nodige sukseskriteria te behaal om geleenthede effektief te benut.

Alhoewel die teorie daarop dui dat KMO's kan voordeel trek uit formele strategiese prosesse, wat hulle in staat sal stel om hul tekortkomings te identifiseer en alternatiewe suksesfaktore te bekom ten einde dié aspekte te oorkom, dui die praktyk daarop dat KMO's selde formele beplanningsprosesse toepas.

Die gebrek aan formele beplanning deur KMO's word toegeskryf aan tydsbeperkinge, 'n vrees dat groei die besigheid se familie-karakter of hul werk-lewe-balans kan versteur, sowel as hul oortuiging dat gewilde raamwerke nie hul kenmerkende tekortkominge in ag neem nie, en dat dit gerig is op hul groter korporatiewe eweknieë.

Skrywers stem saam met die beskouing van KMO's dat gewilde raamwerke hul groter eweknieë bevoordeel, en dat die karaktereienskappe van KMO's direkte toepassing daarvan sal verhoed. Tog is daar bewyse dat sekere komponente van hoofstroomstrategieteorie nie slegs toepaslik is nie, maar ook voordelig is vir KMO's.

Gegewe die verband tussen oorlewing, groei en hulpbronne, dui bewyse daarop dat die finansiële vereistes wat nodig is om 'n besigheid te groei dikwels groter is as die hulpbronne tot die stigters se beskikking. Dienooreenkomstig is die oorlewing en groei van KMO's gekoppel aan hul vermoë om eksterne befondsing te kry.

Die doel van hierdie studie was om 'n formele strategieskeppingsraamwerk te ontwikkel wat die spesifieke eienskappe van KMO's in ag neem, en die bestuur help om metodes te ontwikkel om die nodige suksesfaktore te bekom om 'n geleentheid te ontgin, sowel as om hul kans te verbeter om toegang tot waagkapitaalfinansiering – 'n subkategorie van private beleggers wat befondsing aan nuwe projekte en KMO's verskaf – te verkry.

Dié studie het ‘n aktiewe navorsingsproses gevolg vanweë die vermoë van dié proses om die studiedoelwit van die ontwikkeling van ‘n praktiese instrument te ondersteun, asook die navorser se subjektiewe ontologiese standpunt, en die navorser se betrokkenheid in die navorsingsopset.

Die studie het stelselsdenke as die metodologie toegepas om aktiewe navorsing te doen, aangesien dit die benadering ondersteun dat kennis en begrip van ‘n verskynsel die beste verkry kan word deur ‘n beeld daarvan saam te stel en die verskillende interaksies te verstaan.

Ter ondersteuning van stelselsdenke as ‘n metodiek, is die stelselsingenieurswesemetode gebruik om die studie te doen, aangesien dit gefundeerde teorie en raamwerk daarstelling as ‘n metode om die teorie te ontwikkel, ondersteun. Dit is ook toepaslik vir ‘n bedryfsingenieurswesedoktoraat, aangesien dit die aanwending van ‘n ingenieurswesegedrewe metode gebruik.

Die navorsing het ‘n aantal vereistes ontwikkel gebaseer op KMO-oorlewing en -groei, strategie-ontwikkeling en formulering, asook waagkapitaal, soos gerig deur ’n stel subnavorsingvrae en subdoelwitte, wat die hoofnavorsingsvraag en doelwit ondersteun.

Benewens die vereistes wat afgelei is van die teorie, het die studie bykomende ontwerpoorwegings ontwikkel deur sleutelwoorde, konsepte en frases uit die literatuur te oorweeg, in ag genome die bestek van die studie en die beoogde bedryfsomgewing, sowel as om die raamwerk as ‘n bestuursbenadering te gebruik.

In ooreenstemming met die stelselsingenieurswesetegniek, gebruik die studie konsepformulering om te kategoriseer en konneksies van die funksionele vereistes – soos afgelei van die literatuur – te maak, en om begripsraamwerke met toenemende vlakke van diepte en begrip te ontwikkel.

Die sintese van die verskillende domeine het tot gevolg dat subraamwerke ontwikkel is wat verband hou met die faktore wat ‘n impak het op die KMO se oorlewing en groei, strategievorming en die formulering en belyning van hierdie subraamwerke met die kriteria vir besluitneming oor waagkapitaal.

Gegewe die omvang van die studie, het die tesis op die strategieformuleringsraamwerk ontwikkel, op toenemende vlakke van detail, deur dit eerstens af te breek in ‘n groepering van fases en later in verwante fases, elk met ‘n enkele vereiste en doelwit, asook kernoorwegings om gebruikers deur die strategieformuleringsproses te begelei.

Ondanks die pogings om geleidelike begrip met behulp van die raamwerk te bewerkstellig, het die aanvanklike verifiëring van die subraamwerke die voortgaande kompleksiteit van die onderliggende teorie beklemtoon. Dienooreenkomstig is die finale teoretiese raamwerk omgeskakel in ‘n praktiese raamwerk met behulp van ‘n metafoor (beeld) en grafiese voorstellings.

Die resultaat van die studie is ‘n raamwerk wat die faktore wat ‘n impak het op oorlewing en groei tot ‘n eenheid bring, strategievorming as die suksesvolle tussenspel tussen formele strategieformulering en ‘n deurlopende opvoedings- en leerproses, en strategieformulering wat streef na die ontdekking van kennis, die identifisering van geleenthede en suksesfaktore, en die vermoë om struikelblokke te oorkom ten einde die nodige suksesfaktore te verkry om geleenthede effektief te kan benut.

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DC	- Dynamic Capabilities
GDP	- Gross Domestic Product
IE	- Industrial Engineering
PEST	- Political Economic Social Technological
PEST-E	- Political Economic Social Technological & Environmental
RBV	- Resource Based View
REIPPPP	- Renewable Energy Independent Power Producer Procurement Programme
SME	- Small- to medium enterprise
SWOT	- Strength Weaknesses Opportunities Threats
VC	- Venture Capital
VCs	- Venture Capitalists

Part 1 – Problem Identification, Motivation and Methodology

This document consists of 4 parts, each containing a number of chapters as depicted in the diagram below. The structure of the document and content of the various chapters is a function of the research design, research methodology and method employed with its rationale presented in detail in Chapter 2. Part 1 of this document serves to motivate the purpose of the study by introducing the research problem and subsequently deriving an appropriate research approach that takes into account the author's philosophical perspective, assumptions and beliefs.

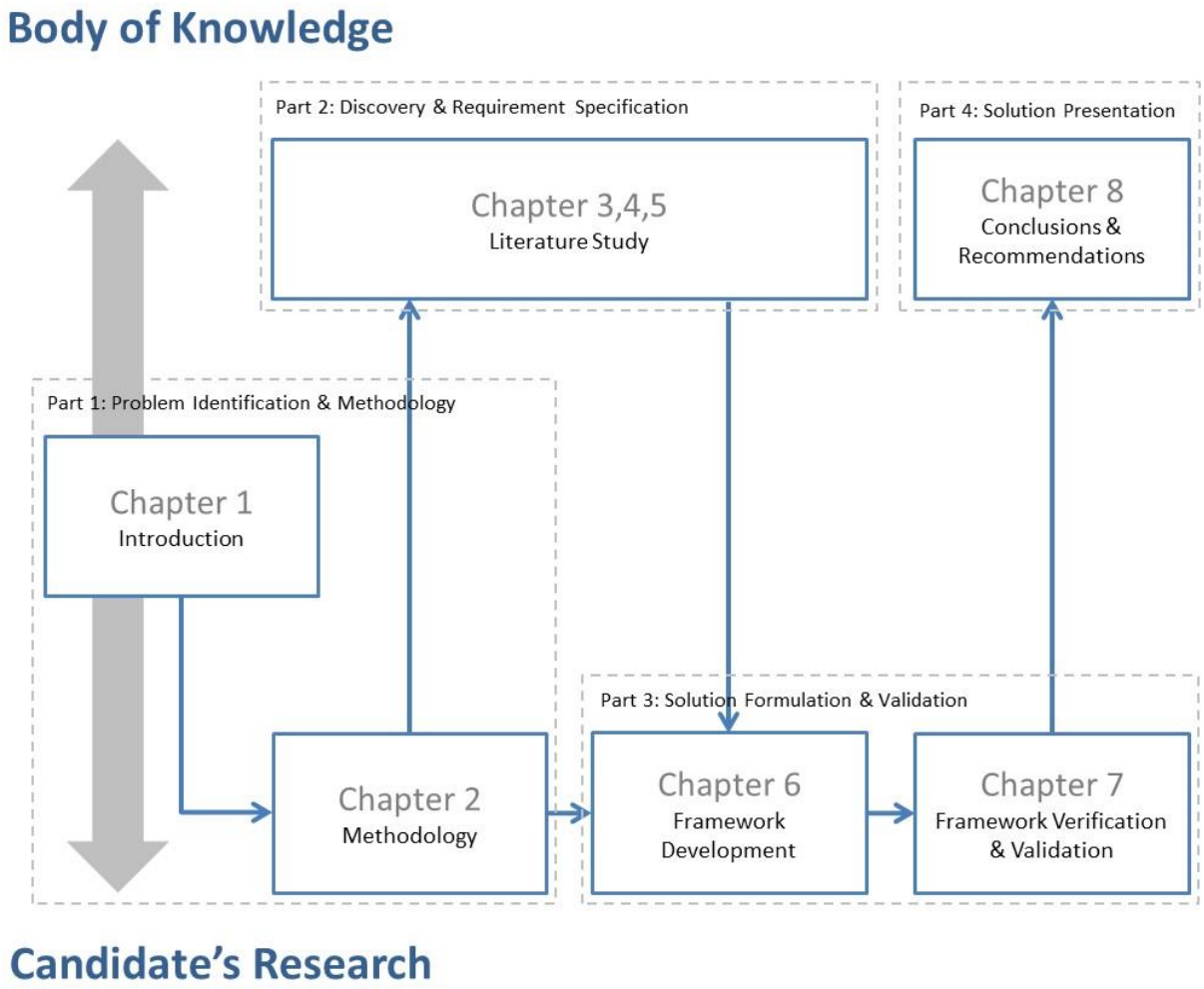


Figure 1 - Study Layout

Chapter 1 – Introduction

The purpose of this chapter is to establish the validity of an academic study that wishes to explore a strategy formulation framework to support the survival and growth of smaller firms; the chapter thus introduces the context, research problem, focus and rationale of the study as well as the relevant scope and objectives.

The main focus of the research is to design a framework that will support small to medium enterprises (SMEs) to formulate a strategy in the hope of improving their chances of survival and success. This study falls within the discipline of industrial engineering, as it contributes to the fields of enterprise engineering and, more specifically, to process improvement as it relates to strategy formulation.

The chapter begins by discussing the field of industrial engineering and enterprise engineering, before providing background information regarding the arguments that culminated in the research problem, the ultimate objective of the study and the subsequent primary research question. The chapter expands upon the research problem to develop relevant sub-research questions and objectives, before discussing the research strategy. The

chapter concludes by outlining the structure of the remaining document, taking into account the research approach.

1.1 Industrial Engineering

The purpose of this section is to highlight the applicability of the study to the field of industrial engineering and enterprise engineering with regard to strategy formulation and enterprise design.

The Institute of Industrial Engineers (IEE, 2016) defines industrial engineering (IE) as follows:

> *"Industrial Engineering is concerned with the design, improvement and installation of integrated systems of people, materials, equipment and energy. It draws upon specialised knowledge and skills in the mathematical, physical and social sciences together with the principles and methods of engineering analysis and design to specify, predict and evaluate the results to be obtained from such systems."*

The field of enterprise engineering originally developed from the discipline of systems engineering, with practitioners ascribing to the definition of an enterprise as "a complex, socio-technical system that comprises interdependent resources of people, information, and technology that must interact with each other and their environment in support of a common mission" (Giachetti, 2010, p. 4). As such, the term "enterprise" includes private companies, government institutions, not-for-profit organisations and supply chains, as well as divisions of formal organisations (Giachetti, 2010).

Enterprise engineering is not a new field; however, it is not recognised as an official discipline, such as electrical or mechanical engineering. Industrial engineers practice enterprise engineering as a sub-discipline, drawing upon their multi-disciplinary background to study enterprises by means of an engineering driven method (Dietz, 2006). As such, it is fitting that this study as an industrial engineering doctorate aims to improve upon the field of enterprise engineering as it relates to strategy formulation, and that it utilises an engineering driven

method in the systems thinking approach and the systems engineering method to investigate the problem and formulate the appropriate solution.

1.2 Problem Setting

The purpose of this section is to provide an overview of the arguments that are discussed further in the literature review, which led to the identification of the research problem.

A wide body of evidence supports the argument that SMEs are responsible for a considerable proportion of employment, GDP[1] contribution and poverty alleviation in both developing and developed economies (Davidsson, et al., 2010). However, the growth and survival of SMEs is not only of concern to policy makers and government but also to larger businesses, as SMEs support a variety of business operations of larger corporates. Therefore larger corporates have a vested interested in the continued survival of SMEs in order not to disrupt their own operations (Griffiths, et al., 2007).

Even though SMEs are considered critical to socio-economic development, their survival rates are concerning. It has been repeatedly documented that about 50% of new ventures do not survive past 5 years (Berger & Udell, 1998) (Huyghebaert & Van de Gucht, 2004) (Mayson, 2009). A global study conducted by the RSA Insurance Group, with a sample set comprising clients in 140 countries, reiterated this view with its findings that 55% of new businesses do not survive beyond 5 years (Whitelock, 2014).

Given the socio-economic importance of SMEs, the field has become a popular topic, with researchers focusing primarily on two subsets of literature relating to (1) the survival and (2) the growth of new ventures and SMEs (Gilbert, et al., 2006).

[1] GDP – Gross Domestic Product is a monetary measure of the market value of a country's economic production (StatsSA, n.d.).

The research stream relating to survival has developed and explored the concept of liability of newness (Stinchcombe, 1965), which proposes that a firm's risk of failure is due to their degree of novelty, i.e., their ignorance or lack of knowledge related to the success factors associated with the new venture. Conversely, studies have determined that survival is a function of the new venture's knowledge and its consequent ability to gain access to resources to perform certain tasks, organise personnel, effectively deliver the product or service, form relationships with key stakeholders and achieve a degree of organisational stability (Shepherd, et al., 2000).

The research stream focusing on growth proposes that new ventures and SMEs achieve growth due to their entrepreneurial orientation, i.e., due to their ability and willingness to identify and actively pursue opportunities (Wiklund, et al., 2009). This requires SMEs and new ventures to (1) leverage their competitive strengths and (2) overcome resource constraints, as SMEs are not simply small big businesses but are normally characterised by resource shortcomings (Ates, 2008). With growth being a function of entrepreneurship, and defined as the pursuit of opportunities beyond the resource base under the current control of the firm (Stevenson, 1983), growth inherently implies an element of 'newness', which inextricably links the topics of SME growth and new venture survival.

Given the link between survival, growth and resources, a specific resource that has enjoyed a large proportion of attention is financial capital, due to the ease with which it can be converted into other resources and due to its ability to provide resource slack to enable the business to pursue new opportunities (Cook & Nixson, 2000). Although the finances required to start a new venture may be obtained from the founder's personal resources and network of family and friends, the funds required to grow the business are often beyond the resource base of the founders (Gilbert, et al., 2006). Where government support is not available or not an option, the probability of survival and growth is linked to the founder's ability to obtain funding from external resources, such as banks and private investors (Gilbert, et al., 2006).

Intuitively, there is a strong link between survival and growth and venture capital (VC), as a subset of private investors willing to provide financing to new ventures and SMEs within the seed, start-up and development phases, and such VC is considered a key catalyst to economic

growth in the 21st century (Shepherd, 1999). However, few new ventures or SMEs are able to obtain VC funding due to the perception of risk, which is related to the probability of failure and the uncertainty of positive returns (growth) (Shepherd, 1999). Therefore, in order for a proposed new venture or SME to obtain VC funding, management has to convince venture capitalists of the SME's ability to overcome the risks of failure, obtain the resources required for the success of the venture, and achieve the necessary growth (Shepherd, 1999).

Research reveals that, ultimately, survival and growth are a function of strategic fit, defined as the degree of match between the key success factors associated with exploiting an external opportunity on the one hand, and the internal resources and competencies at the disposal of the new venture or SME to execute upon the opportunity, on the other hand (Wiklund, et al., 2009). Strategic fit, in turn, is subject to (1) the firm's strategic choice, as this will determine the novelties and obstacles facing the firm, as well as (2) the firm's entrepreneurial orientation and actions to overcome these obstacles (risks) and attain the necessary success factors, which will influence its chances of survival and growth (Shepherd, 2000).

Strategic fit is either a consequence of (1) a deliberate and planned strategy process, or (2) a realised strategy that 'emerges' over time, as the result of day-to-day operations, as employees make decisions "despite, or in the absence of, intentions" and follow a path of least resistance (Mintzberg, 1978, p. 945). Consequently, the question as to whether the SMEs should formulate strategies deliberately or allow the emergent strategy formation process to prevail has been a contested topic for some time.

In summary, proponents of the emerging strategy school propose that the emergent process should prevail, proclaiming that formal deliberate strategic planning is time consuming and accompanied by red tape and rigidity, which contrasts with the SME growth imperatives of flexibility and swift decision making (Bhide, 2000) (Vesper, 1993). In contrast, the deliberate planning school of thought proclaims that strategic choice defines the unique set of obstacles that will be faced by the firm, and that strategic planning is thus critical to success, as it has the advantages of assisting planners to assess their strategic advantages and choices as well as giving them the means to bridge the firm's current resources and its future success

requirements under its growth objectives (Davidsson, et al., 2005) (Wiklund & Shepherd, 2003).

In spite of numerous studies having found a positive link between strategic planning and SME performance (Meers & Robertson, 2007), as well as studies having looked at the advantages of formal planning as proposed above, the evidence suggests that SMEs only engage in strategic planning activities on an irregular basis, that these activities are used by a limited number of individuals within the organisation and that strategies are intuitively developed as a reaction to changing conditions (Kraus, et al., 2007). The lack of strategic planning amongst SMEs is attributed to (1) their inability and/or (2) their unwillingness to formulate formal strategies (Pasanen, 2006).

The inability of SMEs to engage in formal strategic planning is attributed to their limited understanding of the concepts associated with strategy, their limited resources, which include human, financial and customer capital, or simply their need to focus on operational contingencies (Thompson, et al., 2012). Their unwillingness to plan strategically is not only attributed to the entrepreneur's or management's lack of motivation to engage in growth activities due to their fear of growth, but it is also rooted in their lack of belief in the effectiveness of current strategic frameworks, as they believe such frameworks are geared towards larger corporations (Kraus, et al., 2007).

SME owners and management argue that their fear of growth is due to some of the undesirable consequences of growth, such as a loss of the business's "informal and family-like character", a fear of losing ownership control of the business and a decreasing work-life balance (Daviddson, et al., 2007) p. 16). The dominant fear cited is their belief that a larger size business is associated with an inability to survive crises, which is most likely a misconception, as numerous studies in fact propose a positive link between firm size and survival (Aldrich & Auster, 1986) (Stinchcombe, 1965) (Storey, 1994) (Gilbert, et al., 2006).

The lack of belief of SME owners in the effectiveness of current strategic frameworks may be due to the belief that popular frameworks do not take into account their characteristic shortcomings, including a lack of physical, human, network and financial resources (Kraus, et

al., 2007). This notion is supported by Kraus and Kauranen (2009) who found that the unique characteristics of SMEs and their lack of a larger corporation's resource capabilities prevent the direct use of the frameworks and tools that have been established for larger companies. However, in reviewing the strategy formulation processes of SMEs, Ates (2008) found that certain aspects of the mainstream strategy process theory, as proposed to larger corporates, were indeed relevant and beneficial for SMEs, but that SMEs lacked a thorough understanding of the underlying theoretical concepts and that they are therefore unable to utilise those processes effectively.

Accordingly, Ates (2008) called for theory aimed specifically at SMEs to use a different 'language', while Tsoukas (1998) argued for the need for analogies and metaphors in organisational studies, as these can create descriptive imagery and draw on connections of familiar fields and categories of understanding in order to promote new knowledge and understanding. Similarly, Fuller and Moran (1999) propose that theory constructed through the language of a metaphor can take on legitimacy, if it resonates with the actors and provides patterns from which analogical reasoning can be constructed.

The background presented above shows that SMEs are critical to socio-economic development, yet they suffer from a high failure rate, which is exacerbated by an inability and unwillingness to engage in formal strategy formulation activities, as current frameworks do not take into account the characteristic shortcomings of management or the SME in general, but are geared mainly towards their larger corporate counterparts.

Conversely, the background also suggests that SMEs will be able to benefit from a strategy formulation framework that is geared more effectively towards small businesses with an accompanying formal strategy formation process; this framework needs to (1) be understood by management, (2) take into account the specific characteristics and resource shortcomings of SMEs, (3) improve their strategic fit, and (4) assist SMEs in obtaining VC by communicating the risks and any associated mitigating measures that have been taken into account.

1.3 Rationale for the Study

The purpose of this section is to present the rationale for the study, concluding by proposing the research problem that this study will address.

Taking into account the arguments discussed above, the following section outlines the rationale of the study, which is illustrated in the flow diagram in Figure 2 below.

1. SME survival and growth are vital to the socio-economic development of the country.
2. Unfortunately, however, SMEs suffer from a high failure rate, with the survival of a new venture being attributed to (i) overcoming the so-called 'liability of newness', and (ii) growth being a function of entrepreneurial activity that requires setting up 'new ventures' to pursue new opportunities.
3. In either case, in (2) above, survival and growth are a function of strategic fit, i.e., an effective match between an external opportunity and access to resources to exploit the opportunity effectively.
4. Strategic fit in turn is either due to unintentional consequences, or deliberate planning and action regarding which opportunity and resources to pursue.
5. Eventually, successful and growing enterprises will exhaust the financial resources at the disposal of the firm's immediate network, and such enterprises will thus need to gain access to VC funding, which in turn will afford them access to resources and could increase the effectiveness of the strategic fit.
6. Unfortunately, few new ventures and SMEs gain access to VC capital due to their inability to overcome issues (risks) related to failure and growth and hence attain a suitable level of strategic fit.
7. Therefore, a firm's choice, relating to which opportunity and resources to pursue, has an impact upon the obstacles faced by the new venture or SME. The scale and number of obstacles being faced by the firm in turn affects its degree of strategic fit, and therefore also its chances of survival and growth, as well as its ability to gain access to funding.
8. Consequently, the formulation of a formal strategy encourages and allows new ventures and SMEs to identify and consider obstacles, come up with alternative means

of overcoming them and explaining their choices to investors to obtain VC funding. Therefore, formal planning helps SMEs to achieve strategic fit, which in turn improves their chances of survival and growth.

9. However, new ventures and SMEs do not use current frameworks to guide strategy formulation, proclaiming that they do not understand them, and that they believe such frameworks do not take into account their unique characteristics. This is an unfortunate scenario, as aspects of strategy formulation is indeed applicable to new ventures and SMEs.

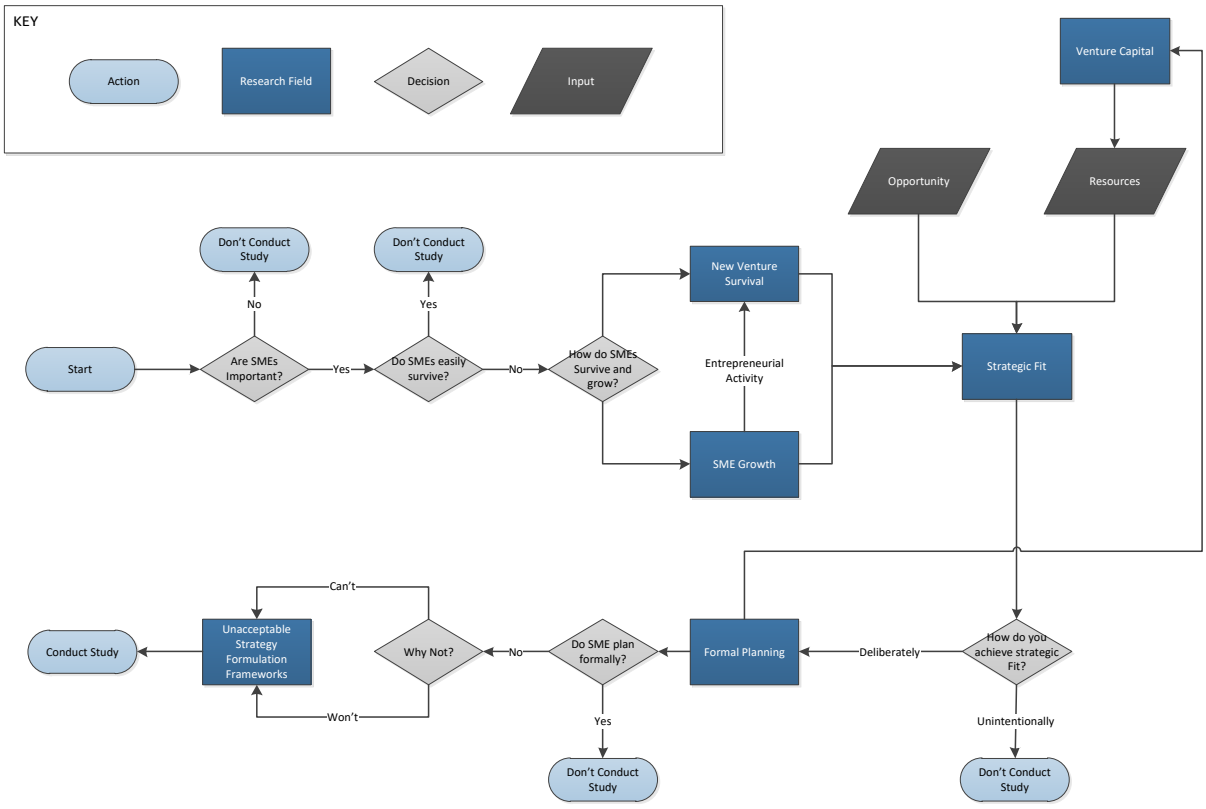


Figure 2 - Study Rationale

The background information provided and the rationale set out above, which is further elaborated upon within the literature review in Chapter 3 – New Venture Survival and SME Growth, led to the definition of the research problem as follows:

There is a lack of a framework that can be adapted to new ventures and SMEs to facilitate strategy formulation and assist in achieving strategic fit through the process of developing the means to obtain the necessary success factors to exploit an opportunity as well as improve their chances of gaining access to finance from venture capitalists.

1.4 Research Gap

The purpose of this section is to outline the existing gap regarding a lack of knowledge and empirical studies associated with the research domain.

Although the dissertation utilises an inductive research approach to develop the necessary success criteria associated with SME survival and growth and successful strategy formation, the study is able to deduce from the top down that current publications argue that a suitable research gap exists in that: general strategic frameworks tasked with facilitating strategic fit are biased towards larger firms and that those aimed at SMEs fall short of their task of (1) taking into account the specific characteristics of SMEs, (2) synthesising the modern perspectives of successful strategy formulation and (3) allowing the user(s) to understand the factors that affect SME survival and growth.

Research proposes that strategy frameworks designed for larger firms cannot be directly applied to SMEs, as they do not take into account the unique characteristics of SMEs (Kraus & Kauranen, 2009), and are too complex and time consuming (Bellamy, 2009). Lofving, et al., in their seminal work which reviewed strategy formulation frameworks for manufacturing SMEs and extended their research to include all SMEs, found that "there is no framework that is both simple and easy to use and fulfils a majority of the empirical requirements [success requirements for strategy formulation derived from literature]" (Lofving, et al., 2014, p. 19).

In addition authors argue that SME specific frameworks erroneously operate independent of an understanding as to strategy and therefore the framework's value in supporting SME survival and that it remains an under-researched field (Bellamy, et al., 2019). Accordingly, authors (Singh, et al., 2008) (Dobbs & Hamilton, 2007) propose that a holistic approach needs

to be adopted as different studies have focused on the relationship between certain strategic issues and competitiveness in isolation, that studies lack identifying the major drivers of competitiveness and that no adequate framework has been found to explain the competitiveness of SMEs i.e. the relationship between strategy and the factors that impact upon SME survival and growth.

The call for a holistic approach to review the value and impact of strategy on the factors that influence upon SME survival and growth is extended by researchers' arguing that other strategy perspectives, beyond the dominant internal and external perspectives, may be relevant to the SME context (Bellamy, et al., 2019). Accordingly authors propose there is a need for a unifying SME strategy framework (Bellamy, et al., 2019) which (1) considers the formal and emergent strategy processes as considered by the strategy as practice research agenda (Jarzabkowski & Kaplan, 2015)(Whittington, et al., 2006) and (2) joins together various strategy tools on the "basis that they would overcome each other's limitations" (Elshamly, 2013, p. 353).

1.5 Research Questions and Objectives

The purpose of this section is to state the primary research question and sub-research questions, which will be reviewed in the literature review in order to support the primary research objective.

From the rationale presented in the previous section and the problem identified, the primary research objective (PRO) of the study is expressed as follows:

To develop a framework to support strategy formulation in SMEs

The following primary research question (PRQ) is considered in order to achieve the research objective:

How can an SME be guided to formulate a strategy?

The study will aim to answer the primary research question through the combination of an extensive literature review and several validation techniques. To ensure that the study achieves its PRO, a number of sub-research questions (SRQ) and sub-research objectives (SRO) were developed and are set out in Table 1 below.

Table 1 - Relevant Research Questions

Domain	CODE	Research Question	CODE	Objective/Solution
New venture and SME survival and growth	SRQ1	What constitutes a firm?	SRO1	Understand the theory that underpins our understanding of the firm and the firm's growth.
	SRQ2	What influences a new venture and SME survival?	SRO2	Understand the issues affecting a new venture and SME survival.
	SRQ3	What influences a new venture and SME growth?	SRO3	Understand the issues affecting a new venture and SME growth.
	SRQ4	How does strategy influence new venture and SME survival and growth?	SRO4	Introduce and understand the possible impact of formal strategy processes on a new venture and on SME survival and growth.
Strategy formation and formulation	SRQ5	What is strategy and what is strategic management?	SRO5	Define and understand the purpose of strategy and strategic management.
	SRQ6	How are strategies formed?	SRO6	Understand how strategies are successfully formed.
	SRQ7	Should SMEs formulate strategies?	SRO7	Define the supporting arguments related to formal strategy formulation in SMEs.
	SRQ8	How are successful strategies formed in SMEs?	SRO8	Define the requirements for successful strategy formulation in SMEs.
Venture Capital	SRQ9	What is VC?	SRO9	Introduce and define the purpose of VC.
	SRQ10	How does VC affect new venture survival and SME growth?	SRO10	Understand the reason to support the use of VC.

	SRQ11	What decision criteria influence VC decisions?	SRO11	Understand the decisions associated with awarding VC to new ventures and SMEs.
	SRQ12	How are VC decision criteria aligned with the factors that influence SME survival and growth as well as successful strategies?	SRO12	Understand the alignment of VC decision criteria to the factors that influence SME survival and growth as well as successful strategies?

1.6 Research Strategy

The purpose of this section is to provide an overview of the research strategy employed to achieve the objectives of the study. The research methodology is discussed in detail in Chapter 2.

Research methodology is concerned with how a researcher conceptualises, theorises and abstracts in order to derive models, explanations and understanding from appropriate research designs and methods of analysis (Sayer, 1992). This section thus describes the background to the researcher's adoption of an iterative process of theory building, in which new ventures and SMEs are viewed as complex adaptive systems. It is concluded that systems thinking as the research methodology, and the systems engineering approach as the research method, are appropriate for deriving relevant explanation by the end of this study.

The methodology and methods used reflect the researcher's subjective ontological viewpoint, namely, that truth cannot be separated from the context within which it was perceived. Therefore, the researcher supports the philosophical paradigm of action research (pragmatism), which is considered to be a paradigm rather than a method due to its philosophical position regarding objectivity and the impact of the researcher on the reality being investigated (Easterby-Smith, et al., 2004). As a paradigm, action research is primarily concerned with practical problem solving, with the researcher acting as a change agent who collaborates with the research setting.

The overarching goal of action research is to build a theory relating to the implementation of a solution and to create tools and methods to aid practical problem-solving (Huxham, 2003)

(Huxham & Vangen, 2003). This study thus aims to lay the foundation for future theory building activities in order to achieve relevance, by creating a strategy formulation framework that can be effectively applied to reality, that resonates with managers and that guides them in making appropriate decisions (Meredith, 1993).

Further to the requirement of theory having to be applicable to reality (Meredith, 1993), Dubin (1969) identified the following five requirements for such a theory:

1. It should allow prediction or increased understanding.
2. It should be interesting (i.e., non-trivial).
3. It should include attributes or variables and their interactions.
4. It should not include 'composite' variables (i.e., variables that include a number of other variables, elements, or attributes that are undefined or difficult to define).
5. It should include boundary criteria.

Based on the author's intention to contribute to the development of relevant theory, the theory building process aims to expand upon descriptive models in order to derive explanatory frameworks; descriptive models do not explain why things happened, but only describe relevant concepts and relationships that influence what happened. According to Naumann (1984), any model that includes some explanatory elements as to why things happened, yet does not ascribe to the five requirements of theory as defined by Dubin (1969) above, is classified as a framework. Therefore, a framework is essentially pre-theory and may substitute for theory in many ways (Dubin, 1969).

According to Olivier (2004), research is defined as a systematic scientific investigation, with the process consisting of collecting, analysing and interpreting information in order to understand a phenomenon or formulate a solution to a problem. Research methodology plays a critical role in the research process, as it serves to support the researcher to produce credible results (Mouton, 2011). As such, methodology serves as the bridge connecting the researcher's philosophical standpoint to the specific research methods and tools used (Hesse-Biber & Leavy, 2010).

In order to ensure that the framework as the research output of this study is credible, the systems thinking approach will be employed as the research methodology. Systems thinking emerged as a research methodology in response to the criticism of reductionism, as this neglects to consider the interrelatedness of the elements that influence a phenomenon. Reductionism as a methodology seeks to generate knowledge of a phenomenon by breaking it down into its constituent parts and studying them in terms of cause and effect.

In contrast, proponents of systems thinking conceptualise organisations as complex systems made up of a number of interrelated parts interacting with their environment. The primary function of management is viewed as ensuring long-term survival and growth by effectively combining and controlling the interrelated parts and adapting to changes in an attempt to hold the organisation in a steady state. As such, systems thinking advocates argue that understanding, knowledge and theory are derived from building up the whole picture of a phenomenon, rather than breaking it down into parts.

The roots of the systems thinking methodology and the systems engineering method to problem solving lie in Checkland's (1985) model of rational thought. Systems engineering as a research method was adopted by researchers, subsequent to its primary application in designing high quality technical systems due to its systematic, iterative and holistic approach to design (NASA, 1995) (Haskin, et al., 2006) .

Figure 3 below illustrates that, similar to the technical system design approach, systems engineering in the research context begins with an intervention (Quadrant 1), with the identification of a problem; thereafter, the problem is broken down into its constituent parts (Quadrant 2) and a set of requirements is derived for the ultimate solution. The method progresses by offering solutions to each requirement identified (Quadrant 3), effectively combining them into an 'explanatory' framework that takes into account the interrelated functioning of the solution components (Quadrant 4). This is followed by reflection on the solution, which leads to any modifications that may be necessary and that ultimately may lead to a better understanding of the problem at hand.

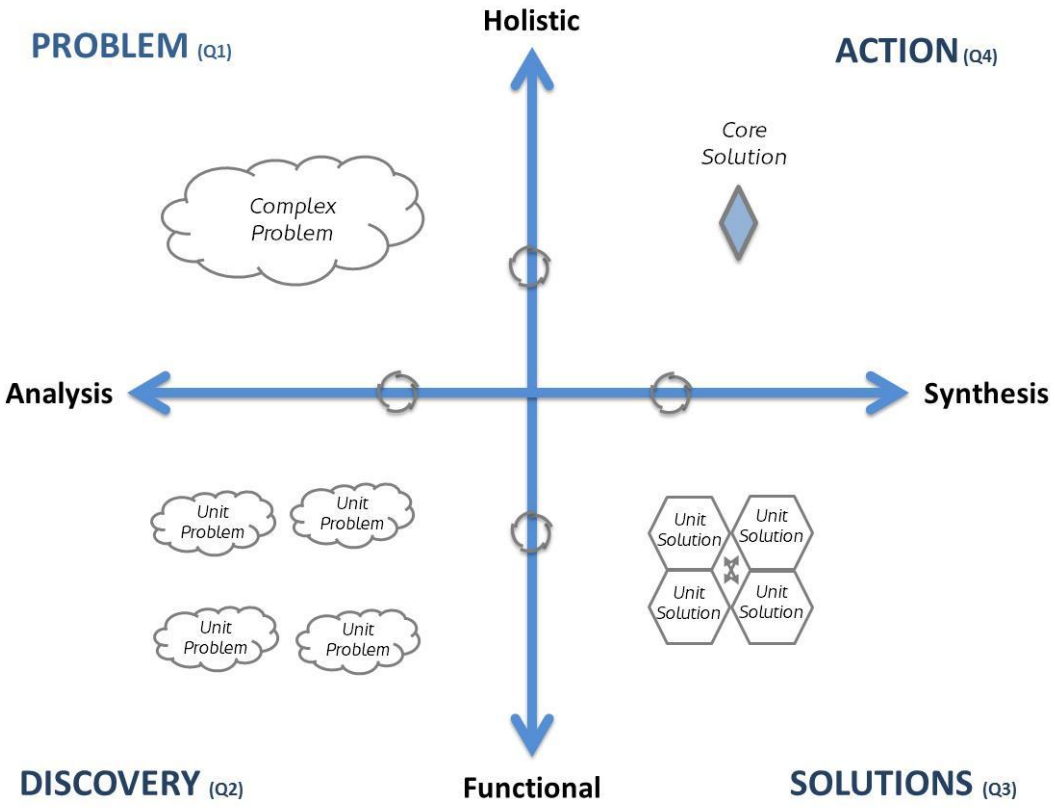


Figure 3 - Systems Engineering Method

In accordance with the discovery phase and requirement analysis, three dominant domains were explored, namely: (1) survival and growth of the new venture and SME, (2) strategy formation and formulation, and (3) venture capital. These research domains were identified from a preliminary literature review in accordance with the rationale discussed in Section 1.3. According to the systems thinking methodology, the study recognises that these domains do not exist in isolation and that the solution space exists where the domains intersect.

In accordance with the systems engineering method, the framework and sub-solutions have to be verified and validated. Verification in the systems engineering method refers to whether the solution adheres to the system requirements, i.e., whether the system was developed correctly. Validation relates to evaluating whether the framework as the final solution to the problem is suited for practical use, i.e., that the correct system has been developed (NASA, 1995).

Consistent with the action research and constructivist/interpretivist paradigms, this study will use qualitative research methods to verify and validate the framework. Taking into account the limitations of *post hoc* research methods and experiments, the study recognises that multiple realities exist due to varying perceptions; consequently, it utilised a semi-structured interview approach in order to capture the complexity of the topic. The study will also incorporate the principles of action research, deriving meaning and understanding through the iterative interactions between the researcher, the research problem and the setting (Checkland & Holwell, 1998, p. 12) to improve the framework.

In order to establish the validity of the study, interviewees included academics within the field of strategy and SME growth, SME owners and managers themselves, and VC experts charged with growing SMEs. The process followed was one of explaining the framework to the interviewee and asking them to provide feedback regarding a number of statements in order to establish the ability of the framework to formulate effective strategies and align the strategic efforts of SMEs with those of venture capitalists.

1.7 Scope of the Study

The purpose of this section is to define the boundary criteria of this study by means of specific limitations and delimitations in order to manage expectations regarding the findings of this study.

A well-defined scope is required in order for the study to produce credible results and plausible claims (Mouton, 2011, p. 177). This section thus outlines what this study 'will' and 'will not' do.

As mentioned in Section 1.3, the aim of the study is to present a strategy formulation tool to aid SMEs in formulating a strategy. As such the strategy formation process is said to contain the elements of (1) strategy formulation, (2) strategy implementation, and (3) review and control.

Given the aim of the study, the last two elements above, i.e., issues of strategy implementation and review and control, fall outside the scope of this study, as they can take years to reveal measurable results. Consequently, the topics related to political issues, in other words, including but not limited to leadership, culture or change management, were not discussed in detail and fall outside of the scope of this study.

As it was not the goal of the study to reinvent the strategy formulation process, the study only reviewed the literature related to the strategy formulation framework in an endeavour to identify suitable models of theory that would fulfil the design criteria or allow for the creation of conceptualisations that fulfil it. Therefore, a completely exhaustive study of all the strategic models proposed by the various authors falls outside the scope of this study, and so too does the idea of identifying the most comprehensive, best or sophisticated model that may exist.

Respecting the motivations of business owners and management in not wishing to achieve growth, the study will focus on firms that do wish to achieve growth, and will consequently assume that the entrepreneur and/or management will be motivated to achieve growth and hence possess elevated degrees of entrepreneurial orientation, i.e., the willingness and the drive to overcome obstacles and pursue new opportunities.

In conjunction with the assumption that the SME wishes to achieve growth, the study takes the position that, in most cases, this growth will extend beyond the financial resources of entrepreneurs, management and their immediate networks, and that the SME will thus have to obtain VC financing in order to acquire the necessary resources to exploit any opportunities that may arise.

The main focus of the research is to design a framework. Unlike frameworks, models are used to develop theories by isolating and studying a few key input and output variables under situation-specific conditions (Porter, 1991). These models are usually rigorous and have limited complexity, with their relevance being a function of fit between the models' assumptions and reality. With regard to strategy, no one model can embody all the variables of interest, and thus the applicability of any model's findings is almost inevitably restricted to a small group of businesses or industries whose characteristics fit the model's assumptions.

Frameworks, however, encompass many variables and seek to capture as much of the complexity of practical situations as possible. The framework thus provides the necessary variables and questions the user(s) must answer in an attempt to guide him or her to develop conclusions tailored to an industry and/or an organisation (Porter, 1991). The theory embodied in frameworks is contained or expressed in the choice of included variables, the way in which variables are organised, the interactions among the variables, and the way in which alternative patterns of variables and accompanying choices affect outcomes.

A framework allows for the fact that not all the interactions among variables can be rigorously drawn. Therefore, the framework will contain complex variables and lack clearly defined boundary criteria, which prevent the framework from qualifying as a theory. However, the framework seeks to help the user(s) to think through the problem more effectively through understanding the business and its environment, and defining and selecting among the strategic alternatives available, no matter what the industry or the starting position may be. As such, the framework as the outcome of this study is not a 'ready to implement' tool, but one that requires the input and innovation of the user(s) and a facilitator and depends on this for its success. Nonetheless, the framework does not guarantee success, but it does provide an improved starting point and a better chance of survival and growth to SMEs.

With the included variables having been extracted from the literature reviewed the framework may never be complete or finished; new elements will be added over time, as new theory is developed. The framework may thus be adopted by certain industries with the choice of adding or removing certain variables from the original framework. Given the envisaged generic nature of the framework, the study will not explore the relative importance of one variable in comparison to another. Rather, the framework will aim to convey the message as to why each variable influences the survival and growth of the new venture or SME, and under which likely circumstances actions could increase or decrease the chances of survival and growth.

Lastly, although the utmost care was taken to adapt the framework to the specific characteristics of SMEs with respect to their diverse pool of employees and varying educational backgrounds, it is assumed that the use of the framework will be facilitated by a

knowledgeable person with the necessary background and experience to explain the elements captured within it. Although the metaphor is intended to resonate with all employees, a facilitator is expected and required to provide context-specific examples and guide the participants in using the tools employed within the framework.

1.8 Structure of the Document

The purpose of this section is to provide an overview of structure of the remainder of this document in relation to the research strategy set out in Section 1.6.

In order to ensure the credibility of the research output of this study, the systems thinking approach was employed as the research methodology, with the systems engineering approach being used as the research method, as illustrated below in Figure 4. In accordance with the method, Chapter 1 (Q1) provides the relevant background information regarding the arguments that led to the research problem and motivate the need for its solution.

Chapter 3 gives further detail regarding the arguments that led to the research problem, and explains the rationale for the literature focus in Chapters 4 and 5. In order to satisfy the second quadrant (Q2), the study will build a set of requirements and solution objectives from the literature reviewed in Chapters 3, 4, and 5 (requirement specification).

Subsequently, Chapter 6 will aim to synthesise the knowledge obtained from the literature and develop a solution (Q3) and verify that the research output adheres to the requirements identified in chapter 7 (requirement verification). Finally, the validity of the research output will be tested via suitable demonstration and evaluation methods (requirement validation), which may inform alterations to the final solution.

The final quadrant is satisfied when Chapter 8 reviews the process and output of the study via the study's conclusion, and makes recommendations for future work.

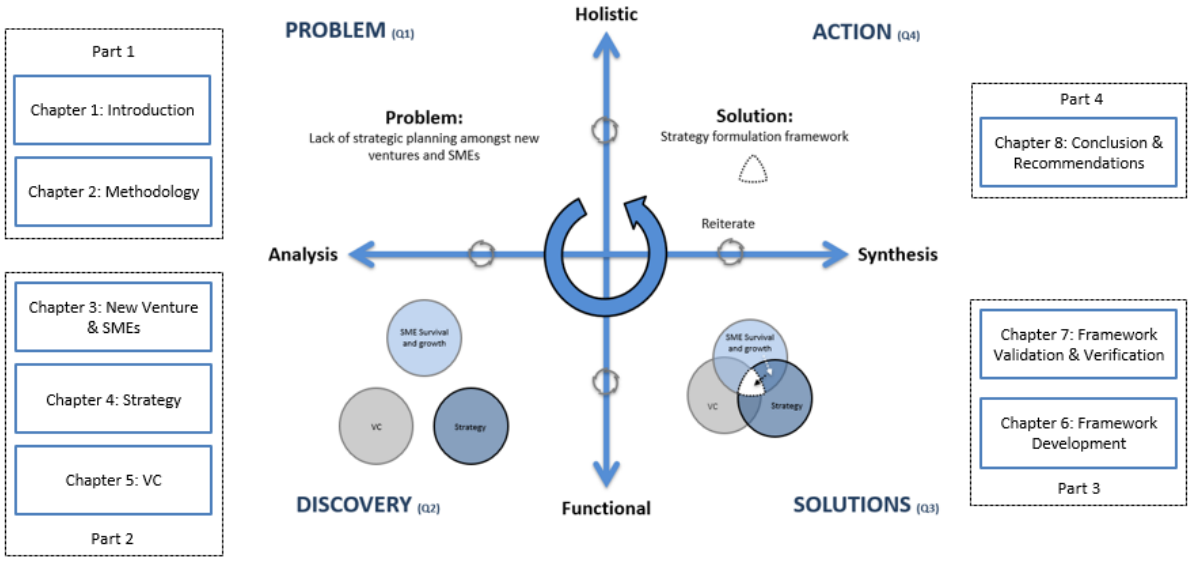


Figure 4 - Document Structure

1.9 Chapter Conclusion

This chapter has initiated the study by introducing the rationale, which led to the development of (1) the research problem, and (2) the research questions and objectives, which will need to be reviewed in pursuit of answering the main research question and achieving the main research objective. The research questions and objectives will be addressed in turn by employing the systems thinking methodology and systems engineering method, as this reflects the author's beliefs regarding the need for a systemised process to build up a solution from interacting components.

Chapter 2 – Methodology

The purpose of this chapter is to establish the suitability of the research methodology and methods employed as a means of answering the research question and achieving the research objective of deriving a framework to aid in strategy formulation.

2.1 Introduction

In Chapter 1 of this document, the rationale of the research problem was presented along with an overview of the research strategy employed in order to answer the primary research question and achieve the primary research objective. This chapter aims to provide an appreciation for the science of research and the choices available to researchers in deriving an appropriate research methodology.

There are different approaches to conducting research with each one being based on certain assumptions or beliefs. It is important to distinguish between the different approaches, and the associated assumptions and beliefs they are based on in order to improve the probability of success as well as to ensure that the research is conducted in a responsible manner (Leedy & Ormrod, 2001).

This chapter starts this process by discussing the philosophical perspectives that have to be taken into account to decide upon an appropriate research paradigm regarding the best way to go about researching and discovering truth within the given research setting. Subsequently, the chapter reviews the decision tree and research map which was reviewed by the researcher to identify the appropriate research methodology (overarching approach) and the individual method(s) that will support the relevant research paradigm.

With the study's philosophical perspective having been identified, the chapter progresses to discuss systems thinking as a suitable methodology and systems engineering as a suitable method to support the study's research paradigm, methodology and method(s) to derive a framework as the output of the study. The chapter concludes with a practical plan of action that will be used to answer the primary and secondary research questions and achieve the primary and secondary research objectives.

2.2 Research Paradigm

The purpose of this section is to provide an overview of the beliefs that influence the researcher's choice of research methodology.

According to Killam (2013), research and inquiry are guided by a set of beliefs. This set of beliefs is often referred to as a world view or paradigm. The word paradigm comes from the Greek word *paradeigma* meaning 'pattern' (Killam, 2013) and is defined by the Merriam-Webster Dictionary (2015) as "a theory or group of ideas about how something should be done, made or thought about." Within the context of academic research, the term paradigm refers to a theoretical framework guiding how research is to be conducted (Beech, 2005).

The different approaches and their underlying assumptions can be defined along four dimensions, namely: ontology, epistemology, methodology and methods/techniques, with the ontological and epistemological positions taken by the researcher influencing the choice of research methodology and methods (Kasi, 2009). The following section will explore the relevant philosophical perspectives and their impact on the researcher's choice of methodology and methods.

2.2.1 Ontology

Ontology comes from the Latin word *ontologia*, meaning 'to be' (Killam, 2013); in research the word ontology refers to the researcher's beliefs about the nature of reality (Beech, 2005). A researcher has the choice of adopting one of two contrasting views of reality and accordingly will be defined as either a realist or a relativist (Ates, 2008a).

As a realist, the researcher will adopt the view that 'truth' exists, that it is separate from human behaviour and bound by natural law, that it can be measured objectively and can be generalised (Killam, 2013). This ontological perspective has been called objectivism or realism and has been the foundation of physical science where 'truth' has been discovered from experimentation in order to derive laws (Ates, 2008a). Furthermore, researchers who ascribe to this ontological view believe that truth is static, and that, once discovered and described by an appropriate law, it does not change (Beech, 2005).

Contrary to the objective view regarding truth, a researcher may ascribe to a subjective ontological viewpoint by believing that truth cannot be separated from the context within which it was perceived (Killam, 2013). As a relativist, the researcher believes that numerous constructs of reality may exist in parallel, as reality is perceived by an individual and as such differs from person to person, the result of their culture or personal experiences (Ates, 2008a). Researchers who adopt this viewpoint search for meaning rather than truth, since reality is constantly changing, based on the viewpoint of the individual (Beech, 2005). In contrast to engaging in experiments, relativists engage with people in order to gain an in-depth understanding of their perceived reality and context (Beech, 2005).

In summary, realists believe that reality is objective, static and measurable, whereas relativists believe that reality is dynamic, subjective and contextual. Killam (2013) provides the following example: for a realist, once a measure of quality of life has been defined, it can be directly measured; in contrast, a relativist would argue that, even though we might know much about quality of life, this differs from person to person, perhaps based on age, i.e., being young or old, or on the person's current health status, i.e., being healthy or having a terminal disease.

The following diagram in Figure 5 compares the dominant perspectives within the contrasting ontological views (Beech, 2005).

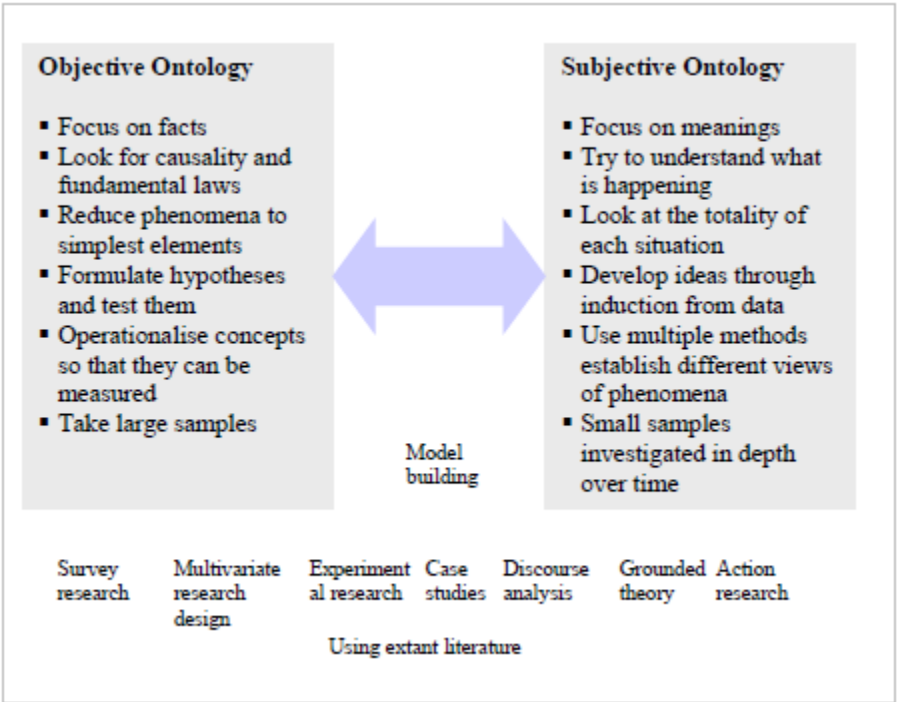


Figure 5 - Ontological Views and Research Methods (Ates, 2008a, p. 53)

2.2.2 Epistemology

Epistemology is derived from the Greek words *episteme*, meaning 'knowledge', and *epistanai*, meaning 'to understand' or 'know' (Killam, 2013). Epistemology is concerned with the relationship between the researcher and knowledge during the process of discovery (Ates, 2008a). There are four epistemological paradigms or general sets of beliefs regarding the best way to discover realities about nature and the world (Easterby-Smith, et al., 2004), namely:

1. Positivism
2. Critical realism / Relativism
3. Interpretivism / Social Constructionism / Phenomenological Approach
4. Pragmatism / Action Research

Positivism ascribes to the belief that the researcher as the observer is independent of the reality that is being observed (Myers, 1997). As such, positivism believes that reality is objective and can be measured, and hence positivist studies are frequently hypothesis driven and accompanied by quantitative testing (Myers & Avison, 2002). Positivism intends to produce an exact replica of reality, ascribing to the laws of probability that a sufficiently large sample size would allow for generalisation (Easterby-Smith, et al., 2004). Positivism has enjoyed a rich history in the natural sciences but has also been applied to the social sciences (Ates, 2008a).

The interpretivist approach in contrast to the positivist approach begins by looking at data rather than formulating and testing a hypothesis or building a theory from the literature (Easterby-Smith, et al., 2004). Interpretivist research ascribes to the socially constructed viewpoint of reality as defined by relativism, and researchers engage in extensive conversations and utilise observations in combination with secondary data analysis to derive a deeper understanding of the different contexts of the individuals who perceive the reality being studied (Ates, 2008a).

Where the philosophical debate regarding reality between positivism and interpretivism is starkly polarised, it presents difficulties in practice (Ates, 2008a). The critical research paradigm is therefore seen as a useful compromise between these two philosophies (Easterby-Smith, et al., 2004). Similarly to interpretivism, the critical research paradigm ascribes to the belief that reality is socially constructed; however, the approach strives towards objectivity through primary data capturing techniques with the context being specific to the sample (Ates, 2008a).

Action research, referred by some as the pragmatism paradigm, is considered to be a paradigm rather than simply a method due to its philosophical position regarding objectivity and the impact of the researcher on the reality being investigated (Easterby-Smith, et al., 2004). As a paradigm, action research is primarily concerned with practical problem solving, with the researcher acting as change agent and collaborating with the research setting (Ates, 2008a). The overarching goal of action research is to build a theory that relates to

implementation and to create tools and methods that aid practical problem solving (Huxham & Vangen, 2003) (Huxham, 2003).

2.3 Methodology and Methods

This section provides an appreciation of how methodology is used to derive appropriate research methods.

According to Hesse-Biber and Leavy (2010), methodology serves as the bridge connecting the researcher's philosophical standpoint to specific research methods and tools. Therefore methodology is an overarching approach to research, and comprises a "combination of techniques used to enquire into a specific situation" (Easterby-Smith, et al., 2004) p. 31).

Researchers will often adopt methodologies according to their beliefs regarding reality and the process of discovery (Beech, 2005) (Killam, 2013). Researchers who adopt the positivist worldview will adopt hypothetico-deductive methodologies, whereby a hypothesis is formulated and tested (Ates, 2008a). Researchers who recognise the importance of context will utilise an inductive methodology, starting with the data rather than the literature (Ates, 2008a). Finally, co-operative enquiry is favoured by researchers who aim to provide practical solutions and subsequently engage in action research, where a high level of involvement is required from the researcher in order to derive empathy for the individual's perspective (Ates, 2008a).

Methods are described as the "individual techniques for data collection, analysis, etc." (Easterby-Smith, et al., 2004) p. 31). The specific methods employed by a researcher are a function of their philosophical perspective and can be broadly categorised as either being qualitative or quantitative in nature.

Quantitative methods are rooted within the positivist belief system and utilise measurements to derive relationships and explanations (Beech, 2005). Quantitative methods ascribe to the belief of objectivity on the part of the researcher, and are usually associated with discovery

in the physical sciences, where measurements can be meaningfully expressed as numerical numbers and analysed mathematically (Easterby-Smith, et al., 2004).

Qualitative research, in contrast, ascribes to the interpretivist paradigm of multiple realities, and accepts the different perspectives of the individuals and the researcher involved in the study, with the ultimate goal of identifying patterns to explain the phenomenon of interest (Beech, 2005). Qualitative research often utilises qualitative data, such as interviews, observations and personal accounts to derive meaning and explain social phenomena (Easterby-Smith, et al., 2004).

Qualitative and quantitative approaches are not mutually exclusive, however, in that a study into a certain aspect of reality may first rely on a qualitative approach to build an understanding and an appropriate hypothesis, before engaging in meaningful quantitative measurements and analysis thereafter (Ates, 2008a).

In practice, researchers derive an appropriate methodology and methods from their philosophical perspectives regarding objectivity and the appropriate means of discovery and knowledge attainment in a particular field of research. As indicated in Figure 6 below, the researcher's ontological and epistemological viewpoints will inform his/her methodology and subsequent methods (techniques) of enquiry. However, the researcher is not limited to employing a single method (technique), as the use of a number of methods can in fact lead to improved validity of the study's results and to the interpretation of reality from a number of perspectives; it can also reduce the impact of pre-existing assumptions and ensure that there are no gaps in the data collected (Easterby-Smith, et al., 2004).

Illustrated in Figure 6 below is the decision tree, which highlights the choices available to the researcher regarding the appropriate research methodology and the individual methods to be used for a specific study, based on the researcher's philosophical perspectives. Thereafter, Table 2 provides a brief description of the research methods available to the researcher. Later in the chapter the study will look to Figure 6 and Table 2 to derive the appropriate research methods.

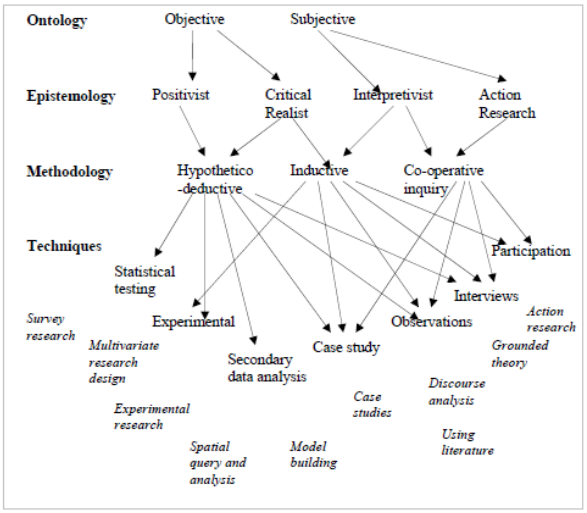


Figure 6 - Research Decision Tree (Ates, 2008a, p. 60)

Table 2 - Research Methods

Research Method	Description
Survey	Surveys include a range of methods, such as questionnaires, interviews and focus groups to collect information from one or more people with the appropriate characteristics with the goal of deriving standardisation and consistency through the use of predetermined questions (Fink, 2005).
Multivariate Research	Multivariate research utilises statistical data from comparing observed outcomes against the predicted values of a forecast model and deriving knowledge and understanding by analysing the relationship by between cause and effect (Ates, 2008a) (Walsh, 2005).
Experimental Research	Experimental research aims to acquire knowledge through the observation of nature, reflection and experimentation, where observation collects facts, reflection combines them, and experimentation verifies the results of that combination (Beech, 2005).
Model Building	Model building attempts to build a representation of reality by defining, theorising and testing relationships (Easterby-Smith, et al., 2004).
Grounded Theory or Systematic Review of literature	A systematic literature review attempts to build a holistic view of and evaluate the arguments surrounding a topic through a formal and systematic review of currently available literature (Biolchini, J; Mian, P; Natali, A, 2012).
Action Research	Action research as a method is an iterative process that determines the current shortcomings associated with a situation, and subsequently designs an intervention (Beech, 2005).

Research Method	Description
Case Study	Case study methods rely on a number of sources to investigate a phenomenon within its real life context in order to understand the issues that influence the phenomenon (Yin, 2003).
Interview	A research interview is a conversation with the purpose of understanding and describing the central issues associated with a phenomenon by attempting to decode what the interviewee is saying (Ates, 2008a) (McMaster, 2005).

2.4 Research Choice

This section illustrates how a researcher's philosophical standpoints and the nature of the phenomenon under study are together used to derive a research strategy.

Given the significant overlap between the various methods that a researcher can employ, as depicted in Figure 6, Beech (2005) and Easterby-Smith, et al.,. (2004) propose that researchers review two major drivers that will have an impact upon their ultimate choice of method. Accordingly, Beech (2005) and Easterby-Smith, et al., (2004) propose that the research method employed is a function of (1) the nature of the phenomenon under study and the output required, i.e., by looking at whether the phenomenon is one that can be measured objectively, or whether measurements only be derived through subjective interpretation; and (2) the researcher's own personal preferences and philosophical assumptions. In either case, the researcher has to justify his/her choice (Yin, 2003).

Accordingly, Easterby-Smith, et al.,. (2004) propose that researchers use the research design map, as illustrated in Figure 7 below, as a tool to decide upon the appropriate research method. The tool maps the research paradigms and methods according to (1) the ontological propositions associated with the nature of reality, i.e., 'objective or subjective', and (2) the epistemological view associated with the relevant level of involvement of the researcher, i.e., 'involved vs independent'. According to Ates (2008a), the research map provides a robust basis for deriving a research design that is adapted to the particular inquiry. By allowing the researcher to substantiate his/her research paradigm and methodology, the map also reveals

the methods that would be most suitable for the researcher to derive credible and valid research and results (Ates, 2008a).

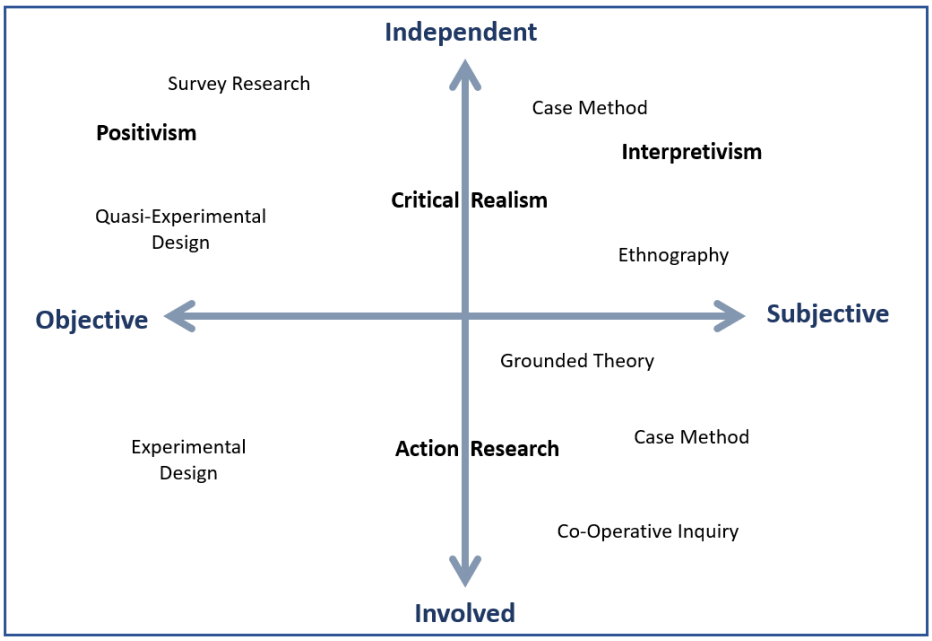


Figure 7 - Research Design Map (Ates, 2008a, p. 73)

In accordance with the research decision tree (Figure 6) and the research design map (Figure 7), the paradigm adopted for this study is action research. This is also referred to as pragmatism, due to (1) its ability to support the objective of this study, namely, to derive a practical tool to support strategy formulation in SMEs; (2) the researcher's subjective ontological standpoint; and (3) the researcher's involvement in the ultimate solution through their interpretation of the theory, and thus their involvement in the ultimate design of the framework.

The researcher's subjective ontological viewpoint stems from his belief that not only is the data available for the study subjective, i.e., it is subject to the perceptions of previous research volunteers, practitioners and researchers, but additionally, that the study will be subject to the researcher's own perceptions and interpretations of reality, when interpreting theory, as well as during the process of data gathering, as he interprets the answers of the volunteers who participated in the study.

Given the researcher's choice of action research as the appropriate research paradigm, and given the research decision tree and the research map, the appropriate methodology for this study is co-operative enquiry, with the individual methods of grounded theory (in the form of a systematic literature review), case studies and interviews together comprising the methodology.

2.5 Action Research, Systems Thinking and Systems Engineering

This section elaborates upon action research as the research paradigm of this study, upon the philosophical connection to systems thinking as the research methodology, and lastly, upon systems engineering as the supporting research method.

According to Huxham and Vangen (2003), the origins of action research can be traced back to Lewin (1946), who proposed that research for application in social practice should be concerned with "the study of general laws … and the diagnosis of specific situations" (Lewin, 1946) p. 36). Subsequently, the term action research has come to be defined as research that involves a researcher interacting with the research setting during the process of discovery, with the dual purpose of providing a practical solution to a problem and advancing knowledge associated with a particular scenario, situation or problem (Huxham & Vangen, 2003). The classical cycle of action research is depicted in Figure 8 below (Susman, G; Evered, R, 1978).

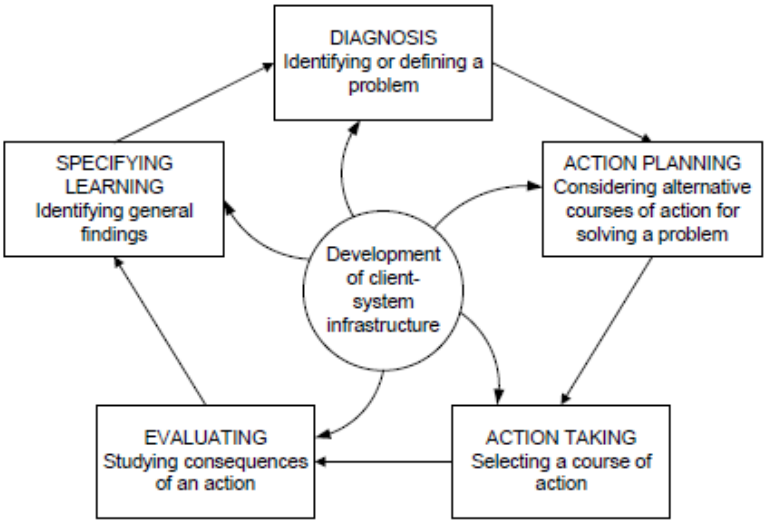


Figure 8 - Classical Action Research Cycle (Susman, G; Evered, R, 1978, p. 588)

Action research is not a 'one size fits all' solution for research. However, it does offer the ability for theory building where other methods are unsuccessful (Bargal, 2006). Interesting insights may be derived from the actions and words of the participants during such an intervention, particularly with regard to the choice of theory favoured by participants when actual action is required. It is this break between theory and practice, which leads to the incremental nature of action research (Goldkuhl, 2012). Researchers are allowed to revisit and build upon previous theory in order to develop new theory and design a solution for practical application. As such, the theory building process within action research is incremental, with each intervention providing new insights and adding knowledge to pre-existing theory (Goldkuhl, 2012).

Although action research ascribes to the subjective ontological paradigm and recognises the importance of taking into account the context within which the reality was perceived, the outcome of the research is not "context bound" (Yin, 2003). Numerous author (Dickens & Watkins, 1999) (Eden & Huxham, 1998) (Reason & Bradbury, 2000) support Yin's point of view, proclaiming that research and theoretical insights developed within a particular context can become a theoretical vehicle to examine and propose solutions within other contexts, i.e., within other industries or geographies. Eden and Huxham (1998) (p. 531) propose the following requirement to allow knowledge to be transferred from one context to another:

> *"if the generality is to be expressed through the design of tools, techniques, models and methods . . . the basis for their design . . . must be related to the theories, which inform the design and which, in turn, are supported or developed through action research."*

Apart from the incremental theory building process and the transferability of knowledge, action research also has other defining characteristics (Reason & Bradbury, 2000). Firstly, action research does not ascribe to an inherent ideological perspective. For instance, imperatives such as empowerment, participation and learning are not necessarily prerequisites of action research, unless it is a concern of the research agenda. Secondly, action research does not require the practitioners within the research setting to be aware of the research aspect of the intervention. In other words, the researcher and the practitioners

may collaborate to design the research action, but this is not essential. Thirdly, there is no explicit level of required involvement on the part of the researcher. The intervention is a means to the research end and, as such, the researcher can play the role of a consultant who is directly involved in driving the solution, or the role of a facilitator who is providing support in formulating solutions, with the intervention being driven by the client.

The distinguishing characteristic of action research, being the involvement of the researcher in the discovery process, poses particular challenges (Eden & Huxham, 1998). In contrast to objective discovery processes, the involvement of the researcher in action research may affect the research setting and subsequent theoretical insights. As a consequence, researchers propose that strict standards of rigor should be imposed with a deliberate systematic approach to theory building, data collection and analysis. Due to this demand for rigor, numerous authors (Bell, 2008) (Burns, 2007) (Coglan & Brannick, 2010) (Reason & Bradbury, 2000) propose that systems thinking used as practical tool provides a liberating approach to action research.

Systems thinking emerged in the out of a critique of the methodology of reductionism (Ison, 2008). The methodology of reductionism proclaims that knowledge and understanding of a phenomenon should be derived by breaking it down into its constituent parts and studying these simple parts with regard to cause and effect (Ison, 2008). System thinking proponents argue that the world is not simple, but that in fact it is systemic (interrelated) and that, as such, a phenomenon is an emergent property of various interactions between the constituent parts (Ison, 2008). The fundamental beliefs of systems thinking are ‘emergence’ and ‘interrelatedness’, and the systems thinking methodology thus prescribes that knowledge and understanding of a phenomenon are not derived from breaking down but rather from building up a picture of the phenomenon and understanding the various interactions (Ison, 2008).

The roots of systems thinking lie in Checkland’s (1985) model of rational thought (Ison, 2008). Checkland proposed that the key to solving a problem is to understand it (Checkland, 1985). The systems thinking methodology (Checkland, 1985) is depicted in Figure 9 below for ease of reference. The methodology is initiated by the identification of a problem (quadrant 1),

which is followed by breaking the problem down into its functional units (quadrant 2). At this critical juncture, the methodology breaks away from reductionism to study the interactions (quadrant 3) between the various solutions identified for the problems raised in quadrant 2, and the combination of these to form the emergent solution to the initial problem (quadrant 4). After employing the methodology, there is reflection on the solution, and modifications may be necessary, ultimately leading to a better understanding of the problem at hand. Consequently, the 4 quadrants and the ultimate reflection upon the solution ascribe to a 5-part process as expressed by the classical action research cycle.

Systems engineering as a research method is a systematic, iterative and holistic approach to design and was adopted from its primary application in designing high quality technical systems, as its principles derive conceptualisations of solutions, which function as an integrated, coherent whole (Ungerer, 2015). As such, the systems engineering method is used to complement the systems thinking methodology to action research.

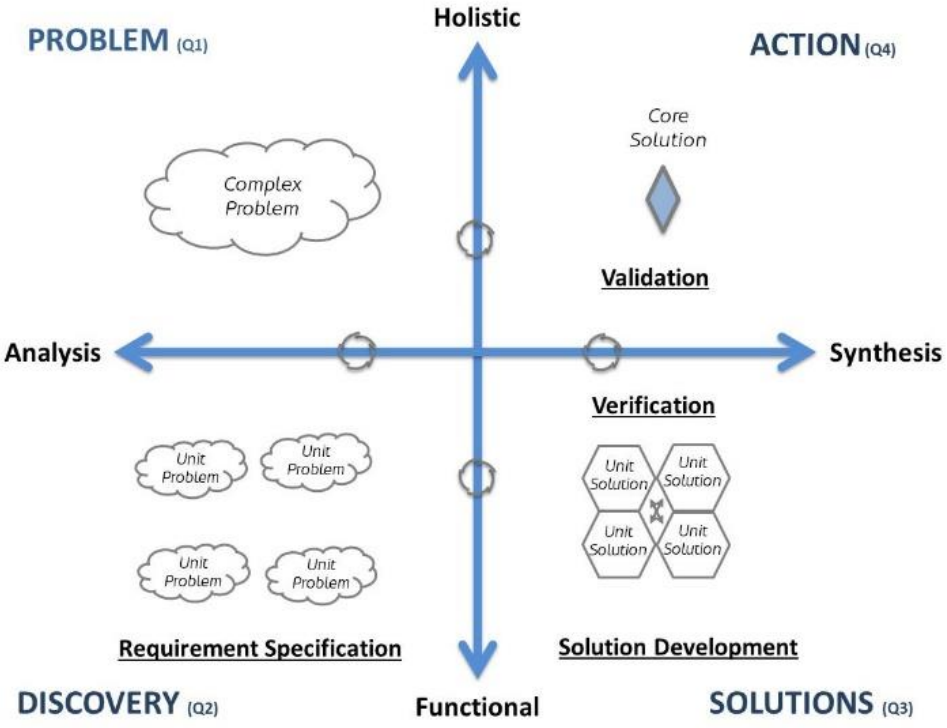


Figure 9 - Systems Engineering Method

Within the research context, as in the case of developing highly complex technical systems (NASA, 1995), the systems engineering method begins by developing a set of requirements and solution objectives from the literature (a step that is also known as requirement specification) (quadrant 2), before developing a set of solution conceptualisations at increasing levels of detail (quadrant 3), and thereafter verifying and validating the conceptualisations at each level before presenting the final solution (quadrant 4), as depicted in Figure 9 above. Within the research context, verification refers to whether the solution adheres to the requirements identified, whereas validation relates to whether the final solution being proposed to the problem achieves its objective (Ungerer, 2015).

The solution development process and synthesis of the final framework requires one to recognise that additional design considerations, informed by the literature review and the envisaged solution space, need to be taken into account and that these design considerations along with the requirements developed from theory may have different implications and restrictions on the final solution i.e., being absolute or a guiding principle. Accordingly the requirements can be grouped according to the categorisation as proposed by Van Aken, et al., (2006) and used by Brockmoller (2008), Weber (2011), Krause and Schutte (2015) and Kennon (2017). The requirements can be grouped into 5 categories (Van Aken, et al., 2006) p.84) namely:

1. Functional Requirements: These dictate performance demands on the design object; for example, in the case of a cake, a functional requirement may be that the cake has to be sweet.
2. User Requirements: These are specific requirements from the viewpoint of the user; in the example of designing a cake, for instance, the user requirement may be that the dough be easy to mould.
3. Boundary Conditions: This refers to reference conditions or constraints that have to be met unconditionally; to continue with the example of the cake, it has to fit into a standard size cake tin.

4. Design Restrictions: These are requirements, which inform the preferred solution space via limits, exclusions and elements of the design; in our example, creating the cake should require non-specialised products.
5. Attention Points: These are specifications that should be noted, but that do not place restrictions on the design and therefore do not have to be specifically met; for example, an attention point in designing a cake is that it has to be eaten at a birthday party.

It is evident from the discussion above that the systems thinking methodology and systems engineering method are suited to conduct research within the action research paradigm, as the approach closely resembles the classical cycle of action research and moreover answers the call for an iterative and deliberate systematic approach to theory building, data collection and analysis. The methodology is also fitting for an industrial engineering doctorate, as in the case of this sutyd, which aims to improve upon the field of enterprise engineering, as it utilises an engineering driven method (Dietz, 2006).

2.6 Theory Building and Conceptual Frameworks

Given that the study intends to develop a framework as an outcome of action research, this section will explore the role and definition of frameworks in the theory building process, the methods associated with deriving a framework, and whether the systems thinking methodology and systems engineering approach support these methods and the process of theory building.

2.6.1 Theory Building

Accordingly to Ates (2008a), theory is a statement of what causes what, and why; it allows researchers and practitioners to formulate a paradigm, i.e., a view of how something should be thought about and done. Wacker (1998) proposes that theory has four components, namely: “definitions of terms or variables, a domain regarding the exact setting in which the theory can be applied, a set of relationships and specific predictions” (Voss, et al., 2002, p.

197). As such, successful theory allows for the drawing of conclusions through an iterative process of developing definitions, domains, relationships and predictions (Wacker, 1998).

Meredith (1993) proposes that theory is the result of an iterative process of cycling through the phases of description, explanation and testing, as each research study builds upon the previous study, as illustrated in Figure 10 below. The theory building process therefore hinges on researchers proposing new or unique contributions to a field, and subsequent studies validating or adding confidence to the previous researchers' hypotheses or invalidating them, forcing researchers to develop valid or more complete theories (Meredith, 1993).

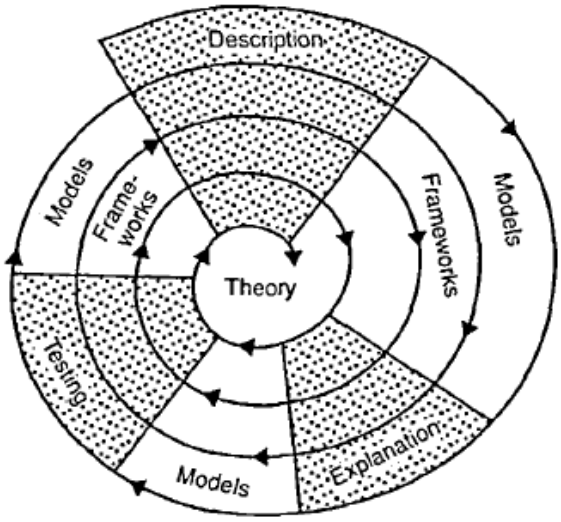


Figure 10 - Theory Building Cycle (Meredith, 1993, p. 4)

In order to qualify as theory, the concept has to meet the following five requirements (Dubin, 1969) (Meredith, 1993):

1. Allow prediction or increased understanding.
2. Be interesting (i.e. non-trivial and applicable to reality).
3. Include attributes or variables and their interactions.
4. Not include "composite" variables (i.e. variables that include a number of other variables, elements, or attributes that are undefined).
5. Include boundary criteria.

In order to derive relevant theory and derive explanatory frameworks, the theory building process aims to expand upon descriptive models; such models do not explain why things happened but rather describe relevant concepts and relationships that affect what happened. According to Naumann (1984), any model that includes some explanatory elements as to why things happened, yet does not meet the five requirements of theory as defined by Dubin (1969), is classified as a framework. Therefore, a framework is essentially pre-theory and may substitute for theory in many ways (Naumann, 1984).

Therefore, the distinction between models and frameworks is not one of complexity but rather of explanatory power (Meredith, 1993). Theories emerge from models and frameworks, but differ in a critical way, in that frameworks are prescriptive and not merely descriptive, i.e. they can be tested (Meredith, 1993). As such, models or frameworks that have prescriptive power yet do not ascribe to the requirements of theory, are often referred to as theoretical models and frameworks (Meredith, 1993). An example of such a framework is Porter's Five Forces Model, as it satisfies Dubin's (1969) first three requirements of theory; however, it fails the last two requirements, i.e., it includes complex variables and does not include boundary criteria (Ates, 2008a).

The distinction that causes researchers to refer to models or frameworks as being conceptual is due to the nature of the respective model or framework and the ontological and epistemological positions assumed within them (Jabareen, 2009). Conceptual models or frameworks are constructed from qualitative analysis rather than quantitative studies, and as such provide interpretations rather than hard facts (Jabareen, 2009). Furthermore, conceptual models and frameworks take an interpretive approach rather than providing a causal analytical setting (Jabareen, 2009). The choice to derive a conceptual model or framework is based on the researcher's philosophical and epistemological views as well as on the evidence available to study the phenomenon (Jabareen, 2009).

As the initial phase in theory building, this study aims to lay the foundation of future theory building activities by providing a strategy formulation framework that resonates with managers and guides them in making decisions; it will fall short of qualifying as a theory, though, as it will contain complex variables to be studied in the future and will lack clearly

defined boundary criteria (Meredith, 1993). Taking into account the utilisation of subjective data and the objective of the study to develop a practical tool with explanatory powers, the study will progress beyond a conceptual model and develop a conceptual framework.

2.6.2 From Conceptual Models to Frameworks

A model represents a simplification of reality and "describes, reflects, or replicates a real event, object or process but does not explain it" (Meredith, 1993, p. 5). There are three primary types of models, each with an increasing degree of abstraction (Meredith, 1993).

- Iconic models: these are at the lowest level of abstraction; they are a physical replication of a system but on a different scale; for example, a scale model of a bridge
- Analogue models: these are at a higher level of abstraction; they are not a physical replication of a system, but mimic the system or a portion thereof; for example, a blueprint of a house
- Symbolic models: these are at the highest level of abstraction; they bear no resemblance to the event, process or phenomenon under study, but allow for the greatest level of manipulation for analysis purposes; for example, a mathematical equation.

In order to progress to the definition of a conceptual framework, the dissertation must first describe a conceptual model, which consists of concepts, constructs and propositions (Jabareen, 2009). A concept is defined as a group of meanings or characteristics related to a certain phenomenon; concepts are used to understand, inform, identify and represent, for example the word 'hot' or the word 'conference'. A construct is an intangible form of a concept, i.e., a concept that cannot be directly or indirectly observed but that can be inferred by observable events, for example, 'motivation' or 'intelligence'. Propositions offer relationships between two or more concepts or constructs, as in, for example, the expression 'more of A gives more of B', or 'familiarity breeds contempt'. A conceptual model therefore consists of a set of concepts or constructs, with or without propositions, which is used to represent or describe but not explain an event, object or process. Subsequently, conceptual

models fall under the domain of symbolic models, as they bear no physical resemblance to the situation or event they are describing.

There are three primary types of conceptual models (Meredith, 1993), which are listed here in order of explanatory power, namely:

1. conceptual descriptions, which have the least explanatory power,
2. taxonomies and typologies, and
3. philosophical conceptualisations, which have the most explanatory power.

Conceptual descriptions, as the name suggests, are primarily a description of an event or phenomenon. The description may be simple or extensive, for instance, it could be a Gant Chart or a textual report. In accordance with the definition of a model, a conceptual description does not explain why things happen, but rather points out concepts and propositions, in other words, the elements that make up the phenomenon and their relationships.

Taxonomies and typologies describe phenomena according to a single scale or a set of scales. Taxonomies are listings of items on a continuous scale under one or more headings, with the overarching principle being one of relative positions, which allows items to be ranked according to certain criteria. Typologies are two-dimensional (or more) taxonomies, where a single measure cannot sufficiently classify or rank an item. As said before, these models do not explain a situation *per se*, but they do describe the situation more accurately than would be the case with pure descriptions.

Philosophical conceptualisations improve the description of the event, situation or phenomenon by linking and connecting previously unexplained events or studies from a unique or insightful perspective. Philosophical conceptualisations are usually derived by utilising philosophical reflection to integrate a number of different works on the same topic and to extend these in one way or another.

Frameworks are not necessarily more or less complex than models; rather, the distinction is based on their explanatory power (Meredith, 1993). As is the case with models, there are three types of frameworks (Meredith, 1993), each with their own contribution to theory building. They are listed here in order of explanatory power, namely:

1. conceptual induction, which has the least explanatory power,
2. conceptual deduction, and
3. conceptual systems, which have the most explanatory power.

Conceptual induction attempts to explain a phenomenon by observing the interaction of various system elements and explaining their relationships. The goal is not only to describe the phenomenon but how it occurred. The accuracy of the framework is judged by the consistency between the explanation inferred and the description of the phenomenon, particularly in reference to the elements and their relationship.

Conceptual deduction proposes a framework of predictions with associated reasoning to enable comparison with reality, as well as to provide guidelines for managers. The process may be initiated via conceptual induction, and by integrating a number of interacting relationships to formulate the framework; however, induction stops and deduction begins, as soon as the framework starts to make predictions, regardless of where the framework was initiated.

Conceptual systems are characterised by a number of concepts and constructs with numerous interrelated propositions. The system is typically as complex as a theory; however, it fails to meet one of the requirements of theory, as defined earlier. A conceptual system may be formed by integrating a number of frameworks into a meta-framework, yet it falls short of being a theory, as it contains composite variables and lacks clearly defined boundary criteria according to the limitations.

With the study aiming to provide a tool that guides managers in making decisions and therefore having to explain to management what is going on and why, the proposed framework will progress beyond conceptual induction to conceptual deduction. Given that

our framework, as a tool that contains a number of concepts and constructs, falls short of becoming a theory, due to the inclusion of complex variables and the lack of definite boundary criteria, it may ultimately qualify as a conceptual system due to the inclusion of a number of sub-frameworks (see Chapter 6).

2.6.3 Conceptual Framework Building

Miles and Huberman (1994) defined a conceptual framework as a visual or written product, one that "explains, either graphically or in narrative form, the main things under study – the key factors, concepts, or variables – and the presumed relationships among them" (Miles & Huberman, 1994) p. 18) According to Maxwell (2005), conceptual frameworks are not found, but they have to be constructed. In other words, conceptual frameworks are made up of 'modules' that are found elsewhere, but the framework's structure and coherence as a whole is built and cannot be found ready-made.

Morse, et al., (2002) state that the method to derive conceptual frameworks begins with the creation of a skeletal framework, which is defined as:

> *"characteristics identified from previous inquiry that provide an internal structure that provides a starting point for observations and interview questions, and for analysis. The researcher proceeds by building on these structures or categories, padding them out or 'giving them flesh' and organizing the ways they fit together" (Morse, et al., 2002) , p.68).*

Therefore, conceptual frameworks can be said both to form part of a study and to be the result of a study. According to Jabareen (2009), every study provides even a modest explanation of its theoretical underpinnings and consequently employs a conceptual framework, even if it is not clearly articulated. For instance, a number of methods have been utilised and prescribed by various authors to describe and explain the occurrence of certain patterns and relationships, which include content analysis, thematic analysis, conceptual analysis and discourse analysis (Jabareen, 2009).

The methods described above (Jabareen, 2009) (Maxwell, 2005) (Miles & Huberman, 1994) follow a general pattern, where "a concept is chosen for examination, and the analysis involves, among other things, quantifying and tallying its presence" (Jabareen, 2009)p.52). Such methods are limited for a number of reasons including a "lack of simple routines, time-consuming data preparation, difficulties in relating textual data to other data, and a lack of a strong theoretical basis" (Carley, 1993), p. 77). These methods tend to focus on examining the occurrence of a certain concept and they may be good for describing it, but they are not good for theorising, i.e., providing a platform from which prescriptions can be made (Jabareen, 2009).

In light of the weaknesses of these methods, some authors argue that grounded theory is the most effective method for deriving conceptual frameworks, as "It is a research method aimed at the discovery of theory from systematically obtained data" (Jabareen, 2009) p.52) (Glaser & Strauss, 1967) (Strauss, 1987). According to Orlikowski (1993), grounded theory is a "context-based, process-oriented description and explanation of the phenomenon, rather than an objective, static description expressed strictly in terms of causality" (Andersson, et al., 2003) p.50).

Grounded theory as a method of rigorous qualitative research was championed by Glaser, et al., (1967) during the 1970s, which was the so-called golden age of qualitative research (Ates, 2008a). The underlying ethos of grounded theory is that theory should be constructed from data (Creswell, 1998). According to Glaser (1992), grounded theory is able to create concepts from data and relate these concepts to general models of theory. Consequently, grounded theory as a research method relies on the researcher's knowledge, understanding and ability to derive theory from concepts, categories and properties (Ates, 2008a).

According to Creswell (1998), grounded theory has the following key properties:

- The main goals are those of discovery and theory generation;
- The researcher has to set aside preconceived ideas to allow the theory to emerge;
- Data sources for theory building include fieldwork, interviews and documents;
- Data analysis should be systematic;

- The process begins with open coding, i.e., identifying categories, properties and dimensions, then progressing to axial coding, i.e., examining conditions, strategies and consequences, before finally selective coding around an emerging storyline;
- The resulting theory can be reported as a graphical or narrative framework or as a set of propositions.

Ates (2008a) proposes that grounded theory as a method is well suited to study complex systems such as organisations, due to its ability to produce a versatile account of action within the organisational context, thereby allowing the researcher to capture complexities and understand specific issues within the system. According to Beech (Beech, 2005), grounded theory and narrative stories have a close relationship, not only as a source of data during interviews, but also as an accompaniment to the emergent theory, as the stories in either case contain 'structures of thought', which have implications for roles, expectations and actions.

Utilising the method and philosophies of grounded theory, Jabareen (2009) suggests a technique to derive conceptual frameworks that "aims to develop concepts – each of which has its own attributes, characteristics, assumptions, limitations, distinct perspectives, and specific function within the conceptual framework – that shed more light on the phenomenon represented by the concepts themselves" (Jabareen, 2009), p.53). Jabareen (2009) further proclaims that, at the foundation of this technique, "lies the interplay among induction, derivation of concepts from data, and deduction aimed at hypothesizing the relationship between concepts" (Jabareen, 2009), p.53) (Patton, 2002).

Jabareen's (2009) methodology comprises the following eight steps:

1. Mapping the selected data sources – this step requires that an extensive review of the multidisciplinary texts is conducted, along with interviews with relevant practitioners, specialists, and scholars who may have insights regarding the phenomenon in question.
2. Extensive reading and categorising of data – the aim of this step is to identify the importance and contribution of the seminal authors within each discipline.

3. Identifying and naming concepts – the aim of this phase is to discovery and name the various concepts that affect the phenomenon under study.
4. Deconstructing and categorising the concepts – the aim of this phase is to understand the underlying principles, assumptions and attributes of the various concepts identified.
5. Integrating concepts – this phase attempts to group together similar concepts, and to integrate them in order to reduce the number of concepts to a reasonable amount.
6. Synthesis and re-synthesis – this phase is an iterative process with the aim of synthesising the concepts into a general theoretical framework that makes sense to the researcher.
7. Validating the conceptual framework – this phase aims to determine the validity of the framework and whether it makes sense to scholars and practitioners.
8. Rethinking the conceptual framework – during this phase, the theory underpinning the theoretical framework may be revised according to new insights, comments and insights from the literature, and thus the framework may be amended to reflect these new revelations.

With the researcher's choice of action research as the research paradigm in this study, the section above demonstrates that building a conceptual framework as a method of building a theory adheres to the underlying principles of action research in being iterative, deliberate and producing a practical tool for problem solving.

2.6.4 Framework Building, Systems Thinking and Systems Engineering

Having established that systems thinking as an approach and systems engineering as a method support the philosophical underpinnings of action research, the study has to establish whether systems thinking and systems engineering support conceptual framework building. Accordingly it is illustrated in Figure 11 how systems thinking and the systems engineering approach encompass the method of framework building as proposed by Jabareen (Jabareen, 2009) .

Figure 11 demonstrates how the second quadrant is associated with the construction of the framework of modules from the literature and the subsequent 'emergence' of new theory, as the interactions between various system elements are studied in order to derive relationships, explanation and meaning, as per the third quadrant. The systems engineering methodology also incorporates the steps of verifying and validating the conceptualisations and reflecting upon the ultimate solution in the fourth quadrant.

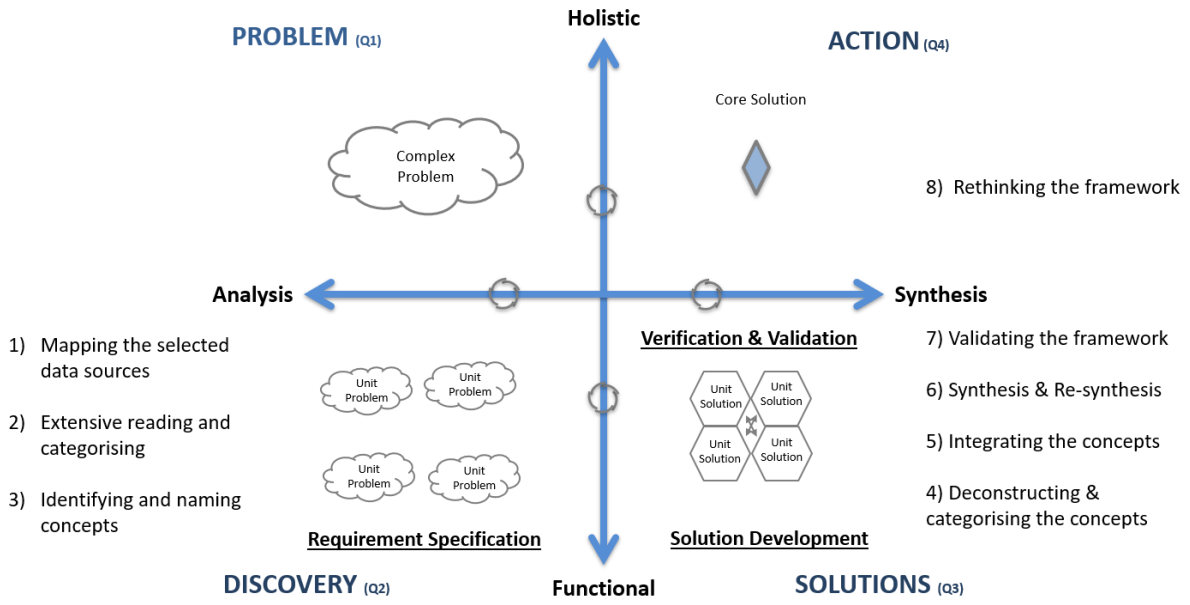


Figure 11 - Systems Engineering and Framework Building

Additionally, the systems engineering methodology not only complements the rigour required by grounded theory as it relates to systematic data review, but it also supports the goal of minimising the impact of preconceived ideas by the researcher through the process of deriving objective requirements from modules of theory (open coding), and subsequently deriving solutions and combining them (axial coding) to construct a new coherent theory or framework.

As is evident from the section above, not only does systems thinking and systems engineering provide a systematic methodology for action research (pragmatism) as a paradigm, as described in Section 2.2.2, but also supports the underpinning concepts of an iterative

deliberate process to framework development and grounded theory as a method for conceptual framework building.

2.7 Collection and Analysis

This section describes the specific techniques, which will be used within the methodology to collect the necessary data.

With the choice of methodology of this study being co-operative enquiry, data will be obtained from primary and secondary sources (Leedy & Ormrod, 2001). Primary sources can be defined as unpublished data that has been collected directly from research participants or from people experiencing the phenomenon under investigation (Leedy & Ormrod, 2001). Secondary data refers to material that has been published and that includes but is not limited to books, journals, articles, websites, reports etc. Both primary and secondary data can either be quantitative or qualitative, as described earlier in Section 2.3 (Leedy & Ormrod, 2001).

The role and influence of the researcher is an important consideration in data collection. In the case of primary data collection, the researcher may unwittingly influence the data. For instance, by re-framing or clarifying a question, the researcher may influence the answer of the person being interviewed (Leedy & Ormrod, 2001). Secondary data too can become subject to influence from the researcher, in his/her choice of interpreting the findings, postulations and theories of the publication under review. The researcher must therefore take care to minimise his/her impact on the data (Leedy & Ormrod, 2001).

Both primary and secondary data were collected for this study: a qualitative systematic review of the literature was completed (secondary) to develop a set of requirements and interviews were conducted with domain experts (see Chapter 7) to validate whether the framework synthesised from the requirements and design considerations achieve the intended objective.

2.7.1 Qualitative Systematic Literature Review

Literature reviews create the foundation of theory development and can be defined as a method of "identifying, evaluating and synthesising the existing body of completed and recorded work produced by the researchers, scholar and practitioners" (Booth, et al., 2012) p.14). Accordingly, this dissertation adopts the definition of systematic literature review as proposed by Okoli and Schabram, "a systematic literature review is a systematic, explicit, and reproducible method for identifying, evaluating, and synthesizing the existing body of completed and recorded work produced by researchers, scholars, and practitioners" (2010, p. 1).

In contrast to unsystematic literature reviews that are usually conducted at the onset of a research study and that cast a broad net around a potential study area, the objective of a systematic review is to identify themes, concepts and constructs, as well as any relationship between these elements across individual studies (Booth, et al., 2012). As such systematic literature reviews are used to develop conceptual frameworks where the goal is to develop emergent theory by "combining … and constructing across published theories with different labels" (Booth, et al., 2012) p.12).

A systematic literature review is conducted via a well-defined sequence of five methodological steps (Khan, 2003) as outlined below:

1. Step 1 – Framing Questions: A systematic literature review begins by specifying clear, unambiguous and structured questions whose answers will address the problem to be investigated.
2. Step 2 – Identify Relevant Work: This step requires using the research questions as a guide to conduct an extensive review of research from multiple sources.
3. Step 3 – Assessing the Quality of the Studies: The quality of these studies should be assessed by reviewing the questions formulated by the original author, the design used and the selection criteria of their data sources.
4. Step 4 – Summarising the Evidence: This step calls for the evaluation of the respective study's results or evidence in terms of quality, characteristics and effects.

5. Step 5 – Interpreting the Findings: Finally, the researcher has to interpret the findings, taking into account any biases and normalising the results to allow for comparison across studies. Any recommendations should be reviewed in terms of the strengths and weaknesses of the study.

Such a systematic literature review aims to produce results that can be reproduced by other researchers utilising the same method and reviewing the same questions, in an attempt to minimise the effects of any biases on the researcher.

In accordance with the methodology laid out above the study initiated by developing research questions to achieve the associated research objectives as developed in Section 1.5. In order to identify the most recent comprehensive works related to the various domains identified the following databases were selected for their coverage of a diverse range of publications (journals, books and dissertations):

- ProQuest
- Scopus
- EBSCO
- Google Scholar
- Web of Science

The keywords included in the various searches are indicated in the table below according to the relevant research domains.

Table 3 - Search Keywords

Research Domain	Search Keywords
New Venture & SME Survival & Growth:	• SME & • New Venture & - Theory of the firm - complex systems - Growth & factors / determinants / barriers / dimensions / activities - Growth & models / frameworks / system - Survival & factors / determinants / barriers / dimensions / activities

	- Survival & models / frameworks / system - growth & stages / states / transitions / life cycle - growth modes - growth effects - - entrepreneurship
SME Strategy Formation & Formulation	• SME & - Strategy management /development - Strategy & process / tools / activities / frameworks / models / systems / - Strategy & formation / perspectives / patterns / formulation / sense making / learning - Business model
Venture Capital & SME Financing	• SME & - Financing & options / hurdles / barriers - Private Equity / Venture Capital / Angel Financing - Venture Capital & process / activities / decision / criteria / life cycle

When relevant publications were identified, references and citations were utilised to conduct upstream and downstream searches to capture additional publications, as well as review and assess the quality of the various publications with regards to their logic and conclusions drawn and contradictory findings and criticism from subsequent reviews. Although searches for new and relevant work were conducted throughout the study, the initial literature review was halted in accordance with the suggestion of Levy and Ellis (2006), that the search can be stopped once repeated searches, by whatever means, deliver the same references and no new results.

Illustrated below is a graphical depiction of the dissertation's systematic literature review utilising the 5-step process as proposed by Khan (2003). The relevant research questions (step 1) and subsequent review of literature allowed the study to identify the seminal works within the research domains and theoretical constructs (step 2), as depicted by the white dots in the centre circle. Scrutinising the works, the dissertation first reviewed the upstream studies and theories which preceded and informed the seminal works, before evaluating the work's quality and deductions by reviewing subsequent diverging theories, criticism and the degree of referencing in recognised journals (step 3). The evidence was subsequently summarised

within the dissertation by providing a review of the progression of theory within a chronological narrative (step 4). Ultimately the dissertation interpreted the findings to make its own suppositions captured within the requirements derived and the supporting arguments associated with each requirement (step 5).

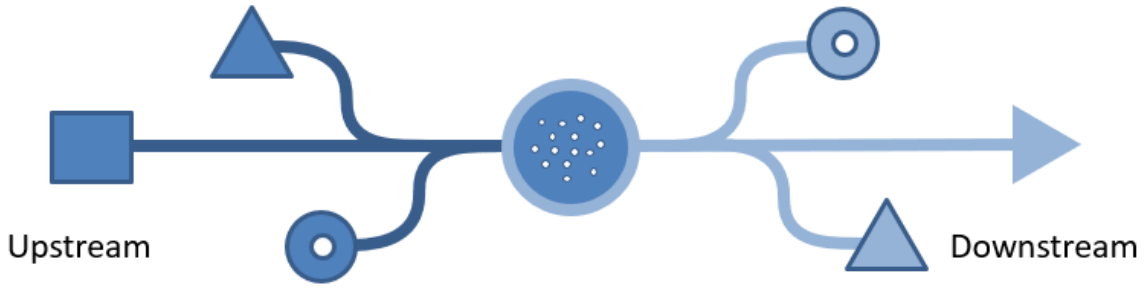


Figure 12 - Graphical Depiction of Literature Review Process

The dissertation reviewed publications between 1937 to 2019. The lack of an abundance of recent publications within the dissertation is the result of two factors. The first factor is that the dissertation adopted the refencing protocol as proposed by Okoli and Schabram (2010), which advocates that unless a more recent publication provides a particular insight or makes a specific contribution to the argument, that the referencing credit should remain with the original authors of the applicable base studies. This referencing protocol assists subsequent researchers as it "does a lot of their work for them, and analyses the primary studies in ways that help other [subsequent] researchers focus their own work" (Okoli & Schabram, 2010, p. 35). The second factor which impacts upon the perceived lack of recent publications within the dissertation can best be described by the findings of Bellamy, et al.,'s 2019 article 'The use of strategy tools and frameworks by SMEs in the strategy formation process', " there has, recently, been a growing interest in conjunction with new literature on the use and adoption of strategic management concepts, theories and frameworks as tools for organisational performance and more specifically by small businesses,.. However, in spite of these recent interests, there remains very little empirical evidence on the use and adoption of strategy tools and frameworks by small- and medium-sized enterprises (SMEs)" (Bellamy, et al., 2019, p. 338). Simply put there aren't many recent publications which make unique contributions

to the primary studies which have directed the various research domains and theoretical constructs.

2.7.2 Interviews

An interview is a conversation with a purpose; within the research context, an interview seeks to understand the replies of the interviewee, in other words, what exactly they are saying, by: (1) asking questions, (2) listening to the answers and (3) recording the replies (Ates, 2008a). There are three types of interviews (McMaster, 2005), namely: (1) structured, (2) semi-structured and (3) unstructured interviews; moreover, they can be in the format of telephone, video conference, group, or face-to-face conversations.

- Structured interviews are based on a defined sequence of pre-prepared questions.
- Semi-structured interviews rely on pre-prepared questions to guide the conversation, but new questions can be formulated during the interview.
- Unstructured interviews do not require a list of pre-prepared questions, but may rely on a rough list of topics to discuss.

In general, interviews have a number of strengths as a research method (McMaster, 2005), amongst others, the ability to appreciate the complexity of the subject under question and to gain depth and detail quickly by being flexible and responsive in asking for the interviewee's opinion. However, interviews also have a number of weaknesses (McMaster, 2005); for instance, they can be difficult to compare within and across studies, respondents may be reluctant to engage in a conversation and may provide only superficial answers, and the interviews may be difficult to arrange and actually slow down the research process.

This study will utilise semi-structured interviews with suitable domain experts with the necessary theoretical and practical backgrounds in order to maximise the amount of value that can be extracted from the process by drawing from interviewees their own opinions, apprehensions and recommendations.

2.7.2.1 Semi-Structure Interviews

Conducting semi-structured interviews requires the researcher to consider:

1) The identification of a suitable informant: According to Whiting (2008, p. 36), the primary qualities of a suitable informant include being:
    - "Knowledgeable about the topic – an expert by virtue of involvement in specific events.
    - Able to reflect and provide detailed experiential information about the area under investigation.
    - Willing to talk."
2) Preparation for the interview: According to Rose (Rose, 1994), prior to engaging in an interview, it is important that the researcher considers a number of practical issues regarding the interview itself, i.e., location, duration, media, areas to be clarified, etc.

Additionally, Rose (1994) suggests that the researcher clarifies the following points before commencing with an interview:

- Clarify the purpose of the interview;
- Specify the topic under discussion;
- Decide on the format of the interview;
- Give the estimated duration of the interview;
- Assure the participant of confidentiality;
- Explain the purpose of the recorder and ask permission to record the interview;
- Explain to the interviewee that he/she may stop the session and ask questions in clarification;
- Assure the interviewee that he/she may wish to decline to answer any questions.

3) Constructing effective questions: Galletta (2013) proposes dividing questions into three segments:

i. Opening Segment: The opening segment should create space for a narrative grounded in the interviewee's experience; the questions in the initial stages of the interview will allow the interviewer to learn about the interviewee and their experience.
ii. Middle Segment: The middle segment should review the topic under study in greater detail, with open-ended questions designed ensure the topic is adequately explored.
iii. Concluding Segment: The final segment of the interview should instigate reflection about the topic and allow the interviewer to ask additional questions not originally planned to explore the topic further.

According to Galletta (2013), constructing effective semi-structured research questions requires the interviewer to:

- Design open-ended questions, which create space and allow the interviewee to speak about his/her experiences, and yet are deliberately and carefully tied to the research topic;
- Consider the purpose of each question, i.e., whether the question is necessary and how will it contribute to the study.

The validation process will draw on these requirements to identify suitable domain experts and craft an interview process to validate the necessary constructs and draw as much value as possible from the process itself.

2.8 Methodology and Research Design

This section presents how systems thinking and the systems engineering methodology were utilised to develop a practical plan of action in order to solve the research questions.

2.8.1 Methodology

As discussed in Section 2.4, this study adopts the philosophical perspective of action research or pragmatism because:

1. this perspective meets the objective of deriving a practical tool to support strategy formulation,
2. it allows for interactions of the researcher with the research setting through his/her interpretation of the data and theory, and
3. it makes provision for the subjective nature of the data being collected.

Systems thinking and systems engineering as a methodology were presented in Section 2.5 as a practical tool to conduct research within the philosophical perspective of action research due to its systematic approach and its ability to impose strict standards of rigor on theory building, data collection and analysis.

Finally Section 2.6.4 illustrated how systems thinking supported the underlying principles of framework building through the notion of using modules from theory to identify system components and recombining these components in order for a new theory to emerge. Section 2.6.4 also deduced that the systems engineering methodology supported the activities of the grounded theory methodology for framework development through its process comprising requirements specification, solution development, verification and validation.

2.8.2 Research Design

Research design encompasses a practical plan of action that is derived from the research methodology in order to answer the research questions and objectives, as tabulated in Table 4 for ease of reference. The plan of action is presented below and is also depicted in Figure 13, as the updated research design and document structure.

- **Q1:** As per the systems thinking methodology, the research problem was developed in Chapter 1, along with the associated rationale as to why the problem is relevant, why no current solution exists and why the solution to be developed has practical applications. From this, a suitable primary research question was derived, along with the primary research objective of this study.
- **Q2:** The second step is a systematic literature review, which incorporates the first 3 steps of Jabareen's (2009) methodology to derive a framework. The literature review

includes mapping and categorising the data sources, identifying and naming the various concepts. As prescribed by the systems engineering methodology, the literature review culminates in a set of solution requirements that must be met by the emergent framework.

- **Q3:** Within this phase, the relevant solutions are developed in accordance with Jabareen's (2009) methodology; it encompasses deconstructing and categorising the various concepts and subsequently integrating, synthesising and re-synthesising the various concepts, and verifying and validating that the solutions through semi-structured interviews, as per the systems engineering methodology.
- **Q4:** The final phase encompasses presenting the results of the study and reflecting on whether the solution answers the primary research question and achieves the primary research objective. As per Jabareen's (2009) methodology, there is also reflection upon the solution framework with the idea of contemplating how new insights and theory may affect the solution.

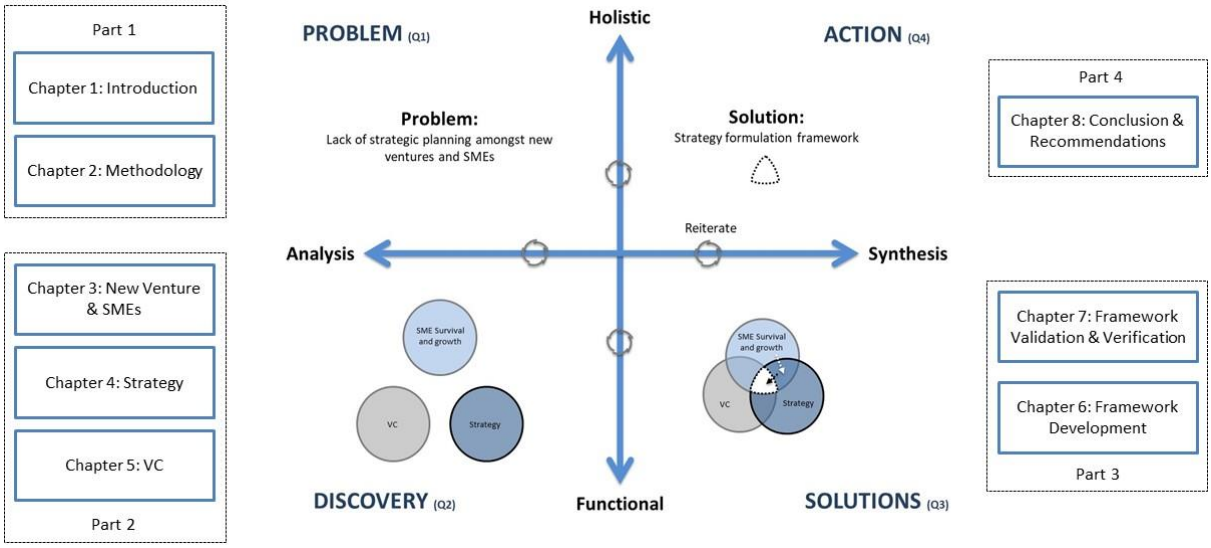


Figure 13 - Research Design and Document Layout

2.8.3 Research Questions and Objectives

Based on the rationale for the study presented in Section 1.3, Chapter 1, the primary research objective (PRO) of the study is:

To develop a framework to support strategy formulation in SMEs

The following primary research question (PRQ) is thus considered in order to achieve the research objective:

How can an SME be guided to formulate a strategy?

The study will aim to answer the PRQ and achieve the PRO by executing the research methodology and design presented in Section 2.8.2. by answering a number of sub-research questions (SRQ) and achieving a number sub-research objectives (SRO), illustrated for ease of reference in Table 4 below.

Table 4 - Sub-Research Questions and Objectives

Domain	CODE	Research Question	CODE	Objective/Solution
New venture and SME survival and growth	SRQ1	What constitutes a firm?	SRO1	Understand the theory that underpins our understanding of the firm and the firm's growth.
	SRQ2	What influences a new venture and SME survival?	SRO2	Understand the issues affecting a new venture and SME survival.
	SRQ3	What influences a new venture and SME growth?	SRO3	Understand the issues affecting a new venture and SME growth.
	SRQ4	How does strategy influence a new venture and SME survival and growth?	SRO4	Introduce and understand the possible impact of formal strategy processes on a new venture and on SME survival and growth.
Strategy formation and formulation	SRQ5	What is strategy and what is strategic management?	SRO5	Define and understand the purpose of strategy and strategic management.
	SRQ6	How are strategies formed?	SRO6	Understand how strategies are successfully formed.
	SRQ7	Should SMEs formulate strategies?	SRO7	Define the supporting arguments related to formal strategy formulation in SMEs.

	SRQ8	How are successful strategies formed in SMEs?	SRO8	Define the requirements for successful strategy formulation in SMEs.
Venture Capital	SRQ9	What is VC?	SRO9	Introduce and define the purpose of VC.
	SRQ10	How does VC affect new venture survival and SME growth?	SRO10	Understand the reason to support the use of VC.
	SRQ11	What decision criteria influence VC decisions?	SRO11	Understand the decisions associated with awarding VC to new ventures and SMEs.
	SRQ12	How are VC decision criteria aligned with the factors that influence SME survival and growth as well as successful strategies?	SRO12	Understand the alignment of VC decision criteria to the factors that influence SME survival and growth as well as successful strategies?

2.9 Chapter Conclusion

This chapter has outlined the considerations taken into account to determine whether action research is an appropriate research paradigm in this study, and whether co-operative enquiry is a suitable research methodology for conducting this study. The chapter concluded that systems thinking as an approach and systems engineering as a method both support grounded theory and framework building as a means to develop theory. Thereafter, taking into account the research design, suitable sub-research questions and objectives were formulated that will guide the remainder of the study and determine the document structure, as illustrated in Figure 13.

Part 2 – Discovery and Requirement Specification

In accordance with the systems thinking approach and systems engineering methodology, the following part of the document will review the relevant research domains and formulate appropriate solution requirements, which have to be adhered to by the framework. For ease of reference Figure 14 *presents the document structure below.*

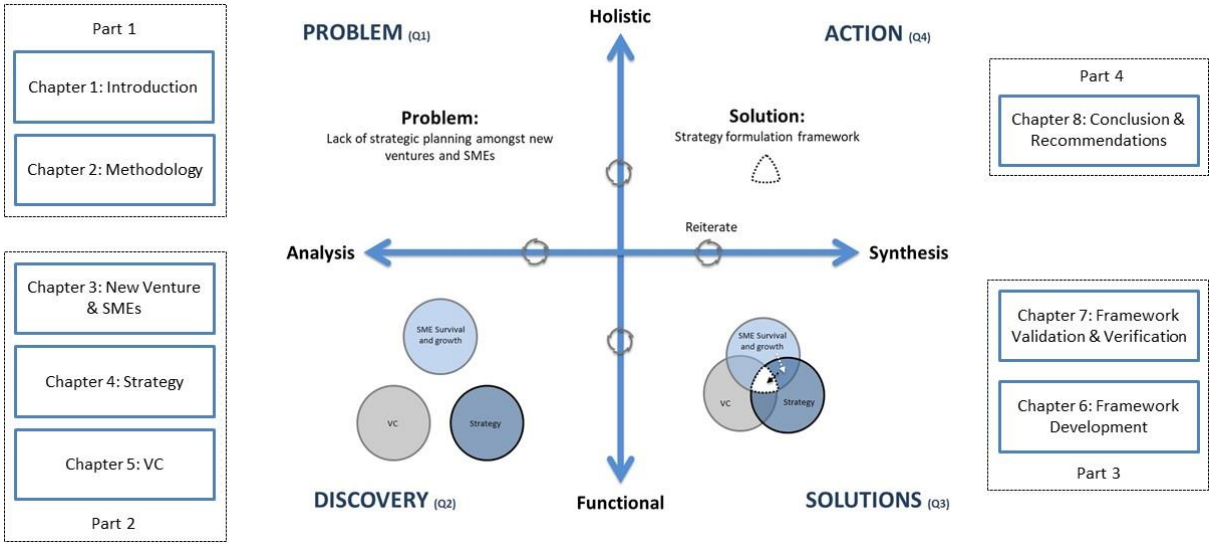


Figure 14 - Research Design and Document Layout

Chapter 3 – New Venture Survival and SME Growth

The purpose of this chapter is to explore the arguments in favour of SME growth along with the subsequent factors that affect the survival and growth of SMEs in order to assess whether the topic of SME strategy formulation should be further explored to develop the solution objective of this dissertation.

3.1 Introduction

In Chapter 1 of this study, the rationale of the research problem was presented along with an overview of the research strategy employed in order to answer the primary research question and achieve the primary research objective. This chapter aims to explore the secondary research questions and objectives as illustrated in Table 5 below, in relation to the field of new ventures and SME growth in support of the primary initiative.

Table 5 - Research Questions SRQ1 to SRQ5 and Research Objectives SRO1 to SRO5

Domain	CODE	Research Question	CODE	Objective/Solution
New venture and SME survival and growth	SRQ1	What constitutes a firm?	SRO1	Understand the theory that underpins our understanding of the firm and the firm's growth.
	SRQ2	What influences a new venture and SME survival?	SRO2	Understand the issues affecting a new venture and SME survival.
	SRQ3	What influences new venture and SME growth?	SRO3	Understand the issues affecting a new venture and SME growth.
	SRQ4	How does strategy influence new venture and SME survival and growth?	SRO4	Introduce and understand the possible impact of formal strategy processes on a new venture and on SME survival and growth.

This chapter begins by reviewing the validity of comparing the results and insights from various studies. This is achieved by reviewing (1) the various definitions and terms that have been used by academics and practitioners to refer to the firm, (2) the specific measurements and characteristics that are used to differentiate an SME from a large firm, (3) the definition of growth and its measurement, and (4) how the debate has evolved with regard to the various structures that underpin the theory of the firm.

Once this chapter has established the foundation for the various concepts that underpin our understanding of an SME, the chapter moves forward in its goal to understand the factors that influence the growth of such a firm, by first establishing the case for pursuing SME growth. Thereafter, in order to understand SME growth, this chapter first explores the survival and growth of new ventures, as these are in many cases the precursor to an SME. The chapter concludes by reviewing the requirements for SME growth and the role of strategy in supporting SME growth.

3.2 Clarifying Terms

The purpose of this section is to understand the various terms used to refer to an SME, and to establish the validity of comparing studies that may use alternate names for an SME.

The words 'firm', 'company', 'business', 'organisation', 'institution' and 'enterprise' are often used interchangeably within both academic and non-academic literature. However, the different terms do imply different legal formats, number of participants, degrees of formalisations and implied duration of existence. Based on a review of the various articles for this dissertation, it seems that no explicit reference is made to a particular archetype, and therefore this dissertation takes the position that the various studies reviewed for the dissertation are referring to the same construct.

In the earliest record of the term 'firm', it is described as a legal format for conducting business, in the form of a partnership or a group of people constituting a partnership, or the name or title under which the members of a partnership transact business (Daft, 2001). A firm is thus an early legal format of a business, where the partners equally bear the risk and earn the returns associated with the business. Moreover, the term 'firm' is explicitly associated with a small number of members, unlike the other legal format of a 'company', which, by implication has a larger number of members (Daft, 2001).

A 'company' is defined as a society or association of persons, in considerable number, interested in a common objective, and uniting themselves for the pursuit of some commercial or industrial undertaking, or other legitimate business (Daft, 2001). The connotation of the term 'company' is that it involves a larger group of people coming together as shareholders, with differing associations of risks and returns in proportion to their shareholding (Daft, 2001).

Both definitions of the 'firm' and the 'company' relate to conducting a business. A 'business' is defined as "any organization whose objective is to provide goods or services for profit" (Shaw & Barry, 1995, p. 4), and thus both a company and a firm qualify as a business. An 'organisation', however, does not have to be a legal entity, as it is defined as:

> *"(1) social entities that (2) are goal oriented, (3) are designed as deliberately structured and coordinated activity systems and (4) are linked to the external environment"* (Daft, 2001), p. 12).

The terms 'institution' and 'enterprise' refer to differing implied durations of existence. Both an enterprise and an institution can be a business, an organisation, a firm or a company; however, an 'institution' is understood as having been firmly established or being permanent in nature (Daft, 2001). In contrast, the term 'enterprise' implies that the business, firm, company, or group project is transient and temporary in nature, because it is taking on a difficult task, i.e., it is being enterprising or entrepreneurial (Daft, 2001).

Given the definition of an enterprise as stated above, the phrase 'Small to Medium Enterprise' to refer to an SME is fitting due to the difficulties associated with the survival and growth of SMEs and their frequently temporary nature. However, SMEs also meet the various other definitions mentioned above, and in the absence of explicit reference to any of the definitions within the literature reviewed, the author believes that the terms are indeed interchangeable, provided that the context is defined as that of being new or small and experiencing difficulty or uncertainty with relation to survival and growth.

3.3 Defining an SME

The purpose of this section is to understand the connotations of the definitions of SME across various sectors and economies.

A major challenge in comparing data across studies is the lack of a universal definition of what precisely constitutes an SME. Consequently, efforts to formulate a unifying definition of an SME have failed due to the heterogeneity of SMEs and the economies within which they operate. Some propose that a single definition for an SME may in fact not be feasible (Ardic, et al., 2011).

The most common criteria used to define SMEs include number of employees, sales and loan value (Ardic, et al., 2011). A recent study conducted by the World Bank (Ardic, et al., 2011)

reviewed the definition of an SME amongst 140 countries: of these, 106 contained a definition of an SME, with 50 respondents using number of employees as the main criterion to identify an SME, and with 29 of these 50 respondents also using sales and loan size. Of the remaining 56 countries, 41 utilised maximum sales income to identify the upper limit of an SME, while 15 used maximum loan value instead.

Not only does the criterion for classifying an SME thus differ among countries but so too does the scale or size. For instance, for those countries using the 'number of employees' criterion to define an SME, the maximum number of employees varied from 5 to 1,000. Similarly, the maximum sales volume for qualifying as an SME ranged from US$124,000 to US$117 million, with the maximum loan value ranging from US$10,000 to US$1.6 million (Ardic, et al., 2011).

Without a definite quantitative definition of an SME, some propose that firm size be accompanied by various qualitative characteristics (Hauser, 2005). Two characteristics that are synonymous with SMEs, and that are a direct consequence of their size in relation to their larger counterparts within their country or industry, are flexibility and resource limitations (Hauser, 2005). The smaller size of SMEs in relation to their larger counterparts affords them a larger degree of adaptability with regard to their market, product or service offering and internal structures. Unfortunately, their smaller size also limits their access to resources, of which the most documented include physical, human and financial capital, as well as intangible network resources (Nooteboom, 2002).

Given the lack of a single definition of an SME, this study accepts that the studies reviewed may be referring to differing size firms. Moreover, it is assumed that these firms, whatever their individual size, are smaller than their larger counterparts within their country or industry, and therefore would be expected to demonstrate the characteristics of flexibility and resource constraints. Consequently, this dissertation assumes that a comparison of the studies and insights derived therefrom are appropriate to inform the ultimate solution as the outcome of this dissertation.

Accordingly, it is also assumed that new ventures fall within the category of SMEs, as they (1) ascribe to the definition of an SME, in that they are associated with uncertainty relating to

their survival and growth, as discussed in Section 3.2, and (2) possess the characteristics of SMEs, i.e., flexibility and a limitation of resources. SMEs and new ventures are therefore structurally very similar, with their difference in designation being primarily attributed to age or 'newness'.

3.4 Defining Growth

The purpose of this section is to understand the various elements under consideration when authors refer to the term 'growth'.

The debate regarding the metric of growth has been a controversial one. In the first classical work in the research field titled, *The Theory of the Growth of a Firm,* Edith Penrose (1959, p. 1) defines the phenomenon as follows:

> *"The term 'growth' is used in ordinary discourse with two different connotations. It sometimes denotes merely an increase in amount; for example, when one speaks of 'growth' in output, export, and sales. At other times, however, it is used in its primary meaning, implying an increase in size or improvement in quality as a result of a process of development, akin to natural biological processes in which an interacting series of internal changes leads to increases in size accompanied by changes in the characteristics of the growing object*.

The lack of clarity surrounding the definition of growth and its manifestation is best illustrated by a study conducted by Delmar, et al., (2003). The study reviewed the top 10 percent of a large sample of high growth firms according to the most frequently cited growth characteristics, namely, sales, job creation, assets, production output, market share and profits. The study concluded that, whereas 40 percent of the top 10 percent qualified due to one of these characteristics, only one sixth of the companies within the 10 percent qualified when using three or more criteria.

Acknowledging the various characteristic manifestations discussed above, this dissertation will adopt the view of firm growth as proposed by Davidsson, et al., (2010), namely, that

business growth occurs over time and that this is accompanied by an increase in sales or an accumulation in the number of employees and/or resources, be they tangible or intangible, and further complemented by an increase in managerial and organisational complexities. Accordingly, this dissertation will predominantly apply the perspective of dimensional size, as explained by Taleb (2012, p. 361), that "a wrong ruler might not measure the correct height of the child but it will certainly tell you if the child is growing". Even though the study takes this somewhat restricted view of growth, it does recognise that growth is a multi-dimensional phenomenon.

3.5 Defining the Firm

The purpose of this section is to understand the various theories of the firm and how they have evolved over time.

In order to understand the factors that affect the survival and growth of a firm, we must first understand the arguments relating to the 'theory of the firm'. The 'theory of the firm' is a set of theories that try to explain and predict the nature of the firm (Foss, et al., 2000), and by implication a company, business organisation, enterprise and institute. The 'theory of the firm' explores the reason for the firm's existence, its structure, its behaviour and its relationship to the market.

The definition of the firm has evolved over the years. Initially, the so-called neo-classical theory viewed the firm as a 'black box' rational entity or a legal entity (in other words, a nexus of contracts) with a production set of resources and plans, the knowledge of which was freely available (Kantarelis, 2007). The theory attempted to explain behaviour according to functions of supply and demand (price mechanism), consumer utility maximisation and profit maximisation, whereby a manager as the organiser of the production set acted rationally and with full perfect knowledge to maximise profits by exploiting the price mechanism (Kantarelis, 2007).

The neo-classical theory has three principal weaknesses (Kantarelis, 2007). Firstly, the theory assumes that complete information exists and that there is thus no agency problem, i.e., no

conflict or mismatch of interests between the manager and the company. Secondly, and similarly to the agency problem, the assumption that perfect information exists about a firm also assumes that no conflict or information asymmetry exists between the firm and the suppliers of inputs, and that there are thus no transaction costs; in other words, the price of the good is solely a function of production costs. The third weakness of the theory is that it does not consider or allow for the evolution of the firm.

Due to the weaknesses of the neo-classical theory in relation to the firm, and in an attempt to address these shortcomings, the Principal Agent and Transaction Cost theories were developed. These theories, however, concentrate on different kinds of costs due to information asymmetry (Kantarelis, 2007). For instance, the Principal Agent theory accepts the neo-classical construct of the firm as a production set but proposes that managers are self-serving (Kantarelis, 2007). The theory thus focuses on information asymmetry between owners of firms, their stakeholders, managers and employees, and the resulting contractual design issues related to performance measurement and incentives. The weaknesses (Kantarelis, 2007) of the Principal Agent theory are related to: (1) the difficulty of designing incentive mechanisms that perfectly match the interests of the agents and the owner, (2) the complexity associated with designing and enforcing contracts to implement this interest match, (3) the concept of transaction costs, and (4) the evolution of the firm.

With regard to Transaction Cost theories, Coase (1937) questioned the neo-classical price theory in asking why a firm would choose to conduct an activity in-house, if the neo-classical theory states that it should be able to purchase the activity for the same price as it would cost for the firm to make it (Kantarelis, 2007). Coase reasoned that there must be a “cost to using the price mechanism” (Coase, 1937, p. 390), and thus developed the concept of transaction costs, as costs that stand separate from and in addition to production costs, arguing that firms exist to avoid these costs. Coase’s theory proposes that the price of goods has a transaction cost component incurred due to (1) searching for and acquiring information about the best price, (2) bargaining and concluding any necessary contracts, and (3) policing and enforcing any arrangements associated with the transaction (Kantarelis, 2007). The firm, according to Coase’s Transaction Cost Theory, comes into existence because it successfully minimises

'make' inputs costs (through vertical integration) and 'buy' inputs costs (using available information and markets). The more specific the inputs that the firm needs are, the more likely it is that the firm would produce them internally and/or acquire them through joint ventures and alliances (Foss, et al., 2000).

The weakness of this theory is that it does not take into consideration agency costs or the evolution of the firm, nor does it explain how vertical integration should take place in the face of investments in human assets, with unobservable value, that cannot be transferred (Kantarelis, 2007). Modern theories of the firm were developed to address these weaknesses.

The evolutionary theories of the firm, for instance, places an emphasis on production capabilities and processes, as well as on product innovation (Foss, et al., 2000). The firm, according to this theory, possesses unique resources and capabilities, which are tied semi-permanently to the firm. According to Hall (1992) the firm's resources or assets can be classified into four categories: tangible resources such as (1) financial assets and (2) physical assets, and intangible resources, which include (3) intellectual property, organisational assets and reputational assets, and (4) knowledge, skills, relationships and capabilities (Foss, et al., 2000).

Evolutionary theories of the firm, sees the firm as a reactor to change and as a creator of change in pursuit of a competitive advantage (Kantarelis, 2007). The firm, as a creator of change, may cause creative destruction, which in turn may give birth to new industries and enable sectors, or even entire economies, to grow (Schumpeter, 1934). Although many countries have established policies to support entrepreneurial endeavours, a weakness of the theory is that innovation with regard to both process and product is difficult to achieve and that it cannot be easily institutionalised, whether in a firm or a nation (Kantarelis, 2007). As a result, 'entrepreneurship' is a very expensive factor of production.

More modern evolutionary theories of the firm represent the firm as a pool of knowledge that builds up over time, with theorists describing the forms of knowledge, their location, and the alternative ways in which they are generated, selected and modified (Kantarelis, 2007). The focus of the evolution theories of the firm is on learning activities and the knowledge

creation process, with knowledge said to be encoded in complex routines and developed into capabilities that build on one another over time (Nelson & Winter, 1982). The firm is also considered to be a cognitive entity, having its own cognitive model, frame or map with its routines describing what it knows, how it knows it and how the outside is understood.

This concept of a firm as a cognitive entity supports the idea of absorptive capacity (Cohen & Levinthal, 1990), which describes the ability of a firm to absorb new knowledge and utilise it to exploit new ideas (Schumpeter, 1934) (Teece & Pisano, 1994). Describing the firm as a pool of knowledge emphasises the firm's role in providing the context (frame) for the individual in whose mind the knowledge is actually developed (Langlois, 1997). The frame is determined by the firm's scope, which in turn is determined by the firm's ability to evolve without threatening organisational coherence (Loasby, 1991).

3.5.1 Research Sub-Question

Reviewing the section above allows this dissertation to answer the first sub-research question (SRQ1) and achieve the first sub-research objective (SRO1), as set out in Table 6 below.

Table 6 - SRQ1 and SRO1

CODE	Research Question	CODE	Objective/Solution
SRQ1	What constitutes a firm?	SRO1	Understand the theory that underpins our understanding of the firm and the firm's growth.

In light of the literature reviewed above, the dissertation forms the following supposition, namely:

(1) Profits are derived from:

a. information asymmetry related to the price mechanism, i.e., knowledge about a mismatch in supply and demand.

b. Information asymmetry related to transaction costs, i.e., knowledge about the acquisition of input factors and the combination of resources, routines and

capabilities, which affect the production function and ultimate delivery cost of the product or service.

(2) Firms are cognitive entities, and tacit knowledge about the price mechanism and the drivers of transaction costs are what differentiate firms, their delivery costs and hence their competitiveness in the market.

(3) Over time, information asymmetry (regarding the price mechanism and transaction costs) becomes eroded as knowledge is acquired by competitors.

(4) Firms should retain the production components that (1) afford them an advantage related to information asymmetry, and (2) firms should strive to address their information asymmetry disadvantages.

(5) In order for firms to remain successful, they have to continually explore and develop the firm's cognitive model and hence its knowledge base to reduce its own transaction costs and pursue new opportunities. This requires the firm to:

    a. State what they believe to be true in terms of the present and future of the price mechanism, the source of their transaction cost advantage and how they have come to these beliefs;
    b. Absorb new knowledge and information and assess its impact upon the firm's existing cognitive model and, if need be, modify the firm's cognitive model and generate new routines and capabilities to create or exploit new opportunities.

The supposition above is in accordance with the dynamic capabilities perspective (Teece, et al., 1997), to be discussed in Chapter 4 (Strategy) of this dissertation. It is also in accordance with Gilbert, et al., (2006) who found that SME growth is contingent on business structures and systems, as these improve the creation of knowledge by supporting communication regarding changing customer needs, products or service offerings, as well as facilitating planning and co-ordination (Olson & Bokor, 1995).

As such, for the framework to be used as a tool to develop successful strategies in order to promote survival and growth, it has to fulfil the following requirements:

- **R1:** The framework will require the user(s) to define the firm's cognitive model, i.e., what they believe to be true and how they have come to adopt these beliefs, relating to:
  - the current and future information asymmetry, which will allow them to exploit the price mechanism;
  - the knowledge asymmetry, which will give them a transaction cost advantage now and for some time in the future, until the same knowledge is acquired by competitors.
- **R2:** The framework will require the user(s) to re-assess and challenge their cognitive model, as new information is absorbed.

3.6 Motivation for Growth

The purpose of this section is to provide an overview of the positive and negative aspects associated with SME growth. Section 3.9.4 will discuss the connection between a positive attitude towards growth and growth itself.

Both academic and non-academic literature has emphasised the need for growth, often equating growth with success (Davidsson, et al., 2010). However, growth is not without its undesirable consequences or growing pains. Research indicates that small business owners and managers are acutely aware that growth has both positive and negative aspects, with evidence suggesting that managers perceive the negative aspects to be more frequent and more pronounced (Davidsson, 1989, b) (Wiklund, 2001) (Davidsson, et al., 2010).

The dominant negative aspect cited by managers and owners is the belief that size would hinder their ability to survive crises or market turmoil (Davidsson, et al., 2010). This is most likely a misconception, as evidence suggests that size is in fact positively associated with survival (Aldrich & Auster, 1986) (Stinchcombe, 1965) (Storey, 1994). Managers and owners of small firms and SMEs also argue that growth would have a negative impact on employee well-being and on the informal and family-like character of the business (Davidsson, et al., 2010). Research supports these fears, proposing that small firms do have certain advantages that they risk losing if they should grow larger (Gilbert, et al., 2006).

As mentioned in Section 1.7, this dissertation recognises the importance of smaller firms and respects their aversion to growth; however, the study will focus on firms who do wish to achieve growth and thus will assume that both the entrepreneur and management will be motivated to seek and achieve growth. The question whether a positive attitude towards growth supports such growth is addressed in Section 3.9.4.

The main arguments in support of the importance of growth and the subsequent study thereof include the ones listed in Table 7 below.

Table 7 - Arguments in Respect of Firm Growth

Argument	Reference
Growth is associated with profitability due to structural changes associated with the process, i.e., economies of scale, network externalities.	(Besanko, et al., 2004) (Stern & Stalk, 1998) (Lieberman & Montgomery, 1988) (Katz & Shapiro, 1985)
Growth is closely related to survival, as growth is associated with age and longevity, hence survival.	(Freeman, et al., 1983) (Carroll, 1983)
Growth is associated with societal benefits, i.e., job creation and improvement in the quality of life.	(Birch & Medoff, 1994) (Storey, 1994). (Davidsson & Delmar, 2003) (Davidsson & Delmar, 2006).
Growth is related to economic growth, increased tax revenue and a reduced burden on welfare support.	(Carrizosa, 2007) (Davidsson, et al., 2010).
Growth stimulates innovation and technological change.	(Pagano & Schivardi, 2003) (Robbins, et al., 2000)
Growth improves market competitiveness by opposing the creation of monopolies and oligopolies to the benefit of the consumer and the host nation.	(Jovanovic, 1982) (Davidsson, et al., 2010)

Due to the benefits associated with SME growth, the field has enjoyed particular interest, as firms attempt to identify and exploit growth drivers, albeit with limited success, as only a small fraction of firms become established larger businesses (Acs & Armington, 2006). The benefits of firm growth are also not only applicable to the immediate firm but to the wider socio-economic environment too (Wagner, 1992).

The section above supports the belief of this study that new ventures and SMEs should actively pursue growth in order to increase their chances of survival and growth, with growth having other socio-economic benefits.

3.7 Survival of New Firms

The purpose of this section is to understand the various factors that affect the survival of new ventures.

In order to understand why businesses survive and grow, we need to explore why businesses fail. In his 1965 seminal work entitled *Social Structure and Organisations*, Stinchcombe (1965) drew on the work of French Structuralism, most notably Levi-Strauss (1949), to analyse why and how organisations are formed, how they evolve and how they cease to exist. Within his work, Stinchcombe formalised a central construct that he referred to as the 'liability of newness'. This construct has played a pivotal role in much of the organisational ecological literature and is considered the theoretical basis from which many conceptual and empirical developments have been made within the field (Abetcola, et al., 2012).

The risks facing a new firm, which are associated with an increased probability of failure, include: the costs associated with learning new tasks (Stinchcombe, 1965) (Singh, et al., 1986); the characteristics of the firm's new product or service (Aldrich & Auster, 1986); the degree of conflicts between new organisational roles (Stinchcombe, 1965); the presence or absence of organisational structures (Stinchcombe, 1965); the strength and stability of links with key stakeholders and partners (Stinchcombe, 1965) (Singh, et al., 1986), and the degree of organisational stability/inertia (Hannan & Freeman, 1989). In order to capture these risks, Stinchcombe introduced the concept of 'liability of newness'.

Subsequently, numerous authors have agreed that businesses fail due to the inability of the new venture to gain access to the resources and capabilities associated with the ability to: perform certain tasks, organise personnel, effectively deliver the product or service, form relationships with key stakeholders, and achieve a degree of organisational stability (Singh, et al., 1986) (Stinchcombe, 1965) (Aldrich & Auster, 1986). Moreover, these factors contribute

to the liability of newness, which declines over time, as the firm obtains access to resources and absorbs these capabilities.

The construct of 'liability of newness' predicts that the failure rates of new firms are high in the first years of the organisation's lifecycle and that it declines monotonically with age. Stinchcombe (1965) argues that organisational mortality during the early stage is due to a lack of 'learning experience'. Stinchcombe thus proposes that new or young organisations suffer from a 'low average quality of performance' due to a lack of experience and having to rely on the co-operation of strangers. However, should the organisation survive, their experience learning curve increases with time, which in turn leads to the development of certain survival determinants, such as the successful exploitation of business routines and relationships with the right partners.

The construct of 'liability of newness' inspired a number of subsequent constructs, including the liabilities of smallness, adolescence and aging. The 'liability of smallness' concept proposed that the size of the firm has certain structural implications and impacts on the firm's ability to survive, for instance, due to a lack of economies of scale, customer concentration, etc. (Hannan & Freeman, 1984) (Aldrich & Auster, 1986). The 'liability of adolescence' concept modified the liability of newness construct by proposing that newly established firms may have an initial stock of assets and that, once these assets become depleted, the probability of failure reaches a peak, i.e., during a period of adolescence; the firm thereafter becomes subject to natural selection (Abetcola, et al., 2012). Whereas the liability of adolescence integrates rather than opposes the construct of liability of newness, both of these constructs are in contrast to the 'liability of ageing' or obsolescence, which was also developed in the 1990s. The liability of aging proposes that a firm's risk of failure increases rather than decreases with age, and that it can assume two kinds, namely "senescence" and "obsolescence" (Barron & Hannan, 1994), p. 387):

> *"Senescent processes cause internal decay that increases failure rates independent of environmental conditions and this is a causal effect of aging [. . .]. Obsolescent processes do not directly increase failure rates and thus are not, strictly speaking, direct causal effects of age".*

Instead, age serves as a proxy for the gap between relatively inert organisations and changing environments (Meyer, 1990). Unlike senescence, obsolescence should not penalise organisations unless they are stressed by changing or turbulent conditions. Senescence is ubiquitous, while obsolescence occurs only during times of environmental upheaval (Abetcola, et al., 2012).

During the latter half of the 1990s, a number of scholars attempted to integrate the differing constructs. They thus adopted an adaptive interpretation, proposing that the effects of age and failure rate are dependent on whether time increases overall learning or not. According to Baum (1996), p. 83):

> *"The liabilities of newness, adolescence, and obsolescence can be treated as complementary rather than competing organizational processes if one is able to understand the contingency factors that cause one, the other, or some combination of these models to predominate."*

Effectively, Baum (1996) argues that firms should recognise that their probability of failure is in constant flux, as not only the tasks required within an industry are changing ,but so too do the resource and knowledge success requirements for performing these tasks effectively, thus placing new knowledge demands on firms to ensure their continued survival.

The momentum of the 1990s was carried over into the new century with the various constructs of liability of newness, adolescence and obsolescence continuing to receive attention. However, the focus of studies has since shifted from which construct was prevalent to understanding the causes and problems associated with each.

Shepherd, et al., (2000) integrated the views and findings of their predecessors and proposed that the risk of failure is associated with the 'liability of newness', which they define as the degree of novelty (ignorance and/or lack of knowledge) associated with the new venture within three dimensions, namely, novelty to the market, to production, and to management. According to Shepherd, et al., (2000, p. 393),

> *"novelty to the market concerns the degree to which the customers are uncertain about the new venture. Novelty in production concerns the extent to which the production technology used by the new venture is similar to the technologies in which the production team has experience and knowledge. Novelty to management refers to the entrepreneurial team's lack of business skills, industry specific information, industry partnerships and start-up experience".*

Although there is considerable agreement regarding the relationship between degree of novelty and risk of failure, authors are unable to agree on whether entrepreneurs are able to reduce the risk of failure through their actions (Whittington, 1993). Pessimistic evolutionary scholars propose that the ability of learning to reduce risk is limited within the Darwinian view that companies cannot survive if they are ill-suited to their environment (Hannan & Freeman, 1989). These authors propose that, if new ventures begin wrongly, entrepreneurs will have a limited ability to change their course of action and behaviour to stave off death. Optimistic evolutionary scholars, in contrast, propose that the acquisition of knowledge and subsequent adaptation improves chances of survival via the same mechanism as the learning curve, i.e., where production costs reduce in relationship to the cumulative number of items produced (Parkhe, 1991).

Shepherd, et al., (2000) in agreement with Mintzberg (1990) propose that the entrepreneur's strategic choices, be they the function of past experiences or learning from other companies within the same industry or from companies in other industries, affect the 'unique package' of issues and the degree of novelty that a new venture faces. This view does not exclude the predetermined 'pessimistic' evolutionary path but rather proposes that the path is broad and thus allows the entrepreneur a degree of strategic discretion. Shepherd, et al., (2000) argue that managing this strategic discretion through risk reduction strategies can in fact decrease the degree of novelty and improve a new venture's chance of survival.

Risk reduction strategies are actions that decrease the overall novelty of the new venture and hence its risk of failure, and that by implication improve its chances of survival and success (Shepherd, et al., 2000). Risk reduction actions provide information to consumers, producers, managers, partners and other key stakeholders that reduce their lack of knowledge and verify

the firm's legitimacy, subsequently reducing novelty (Shepherd, et al., 2000). These types of risk reduction strategies should moreover empower firms with the necessary resources and knowledge to execute effectively the tasks associated with ensuring their survival.

The perception of legitimacy has been proposed as a considerable force that constrains, constructs and/or empowers firms (Suchman, 1995). Legitimacy within the context of the firm is defined by Suchman as "a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate with some socially constructed system of norms, beliefs and definitions" (1995, p. 574). Therefore, risk reduction strategies must consider not only the acquisition of knowledge in absolute terms but also the incumbent industry's rules, norms and beliefs, which may constrain the firm even despite the acquisition of knowledge.

Integrating the necessity to establish the legitimacy of the firm on both the 'micro' (task and individual) level as well as the 'macro' (institutional form) level (Uberbacher, 2014), Zhang and White drew on the seminal work of Suchman to propose that legitimacy requires the firm to consider "a) the object of legitimacy, b) the audience's evaluating legitimacy, and c) the purpose of achieving legitimacy" (Zhang & White, 2016, p. 606). Accordingly:

1. The object of legitimacy requires the firm to consider the specific actors of the firm (individuals, teams and partners) as well as the organisation's form and sub-organisational features (practice, activities, role or structure);
2. The audience's evaluating legitimacy requires the firm to consider the target customer group, entrepreneurs or firms who control enabling resources, small groups of actors such as investors, or a single person in the form of a regulator or opinion leader; and
3. The purpose of legitimacy requires the firm to consider the non-mutually exclusive objectives of acquiring resources as well as credibility and trustworthiness, and the actions that each of these require.

Reviewing the Chinese solar photovoltaic industry, Zhang and White (2016) identified three primary strategies that enabled the perception of legitimacy of new market entrants, albeit recognising that these strategies may not be the only ones available. These strategies were "leveraging existing legitimacy, aligning with existing norms of legitimacy, and enacting the

environment to change the definition of what is legitimate" (Zhang & White, 2016, p. 613). Additionally, Zhang and White note that previous models of entrepreneurial action include legitimacy as a resource (Zimmerman & Zeitz, 2002); however, they propose that models of entrepreneurial action should not only view legitimacy as a resource but should include the actual process and actions of acquiring legitimacy.

There is no limited number of risk reduction strategies, with the actions including effective business model design, outsourcing, joint ventures or mergers, which negate or reduce the need for certain competencies, or simply acquiring the necessary competencies, i.e., by hiring personnel with experience, industry contacts etc. (Shepherd, et al., 2000).

Figure 15 below illustrates the concept of risk reduction strategies in comparison to an evolutionary learning curve, as it pertains to the liability of newness; importantly, it does not take into account the concept of liability of aging, where the risk of failure may increase over time. Both the evolutionary and strategic risk paths assume that the risk of failure is greatest after a period of adolescence, once the initial stock of assets has become depleted and the firm becomes subject to natural selection. The evolutionary risk path thereafter assumes that the risk of failure reduces monotonically as the firm and the market absorb new knowledge 'organically'. In contrast, the strategic risk path assumes an accelerated reduction in the risk of failure, as the entrepreneur and management implement risk reduction strategies, which accelerate knowledge absorption or negate the need for certain knowledge. Importantly, the strategic risk path illustrates that risk reduction strategies may be subject to shocks, which increase the firm's risk of failure should the knowledge component no longer be relevant or its ownership no longer be under the control of the firm.

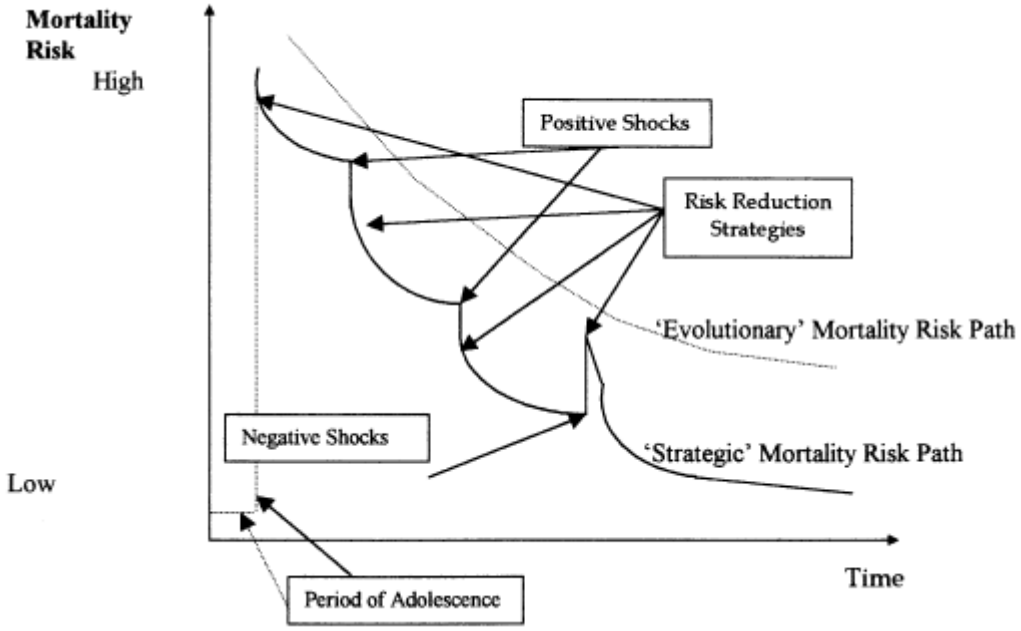


Figure 15 - Evolutionary Vs Strategic Risk Path (Shepherd, et al., 2000, p. 403)

The pessimistic and optimistic evolutionary views as well as the strategic view discussed above all emphasise that the acquisition of knowledge over time by managers, employees, customers, suppliers, regulators and other stakeholders reduces novelty and hence reduces the risk of failure. Novelty within a single dimension is not isolated, however, and a reduction in novelty in one area may also reduce novelty in another; for instance, gaining management expertise may also reduce novelty related to a production technology (Shepherd, et al., 2000). Novelty is also not static, in that internal and external shock may increase or decrease novelty within a dimension; for instance, the death of a technical expert may require a company to relearn production capabilities or make new innovations, which may affect accepted production methods and techniques (Shepherd, et al., 2000). The overall novelty of the venture may furthermore affect the absorptive capacity of the company, in other words, its ability to recognise and incorporate new information (Cohen & Levinthal, 1990). Companies with a limited degree of novelty would more easily identify and absorb new knowledge related to it and thus more rapidly reduce the risk of failure (Shepherd, et al., 2000).

3.7.1 Research Sub-Question

Reviewing the section above allows this dissertation to address the relevant sub-research question (SRQ1) and sub-research objective (SRO2) illustrated in Table 8 below.

Table 8 - SRQ2 and SRO2

CODE	Research Question	CODE	Objective/Solution
SRQ2	What influences a new venture and SME survival?	SRO2	Understand the issues affecting a new venture and SME survival.

Based on the discussion in above, the study makes the supposition, in accordance with Shepherd, et al., (2000) and Mintzberg (Mintzberg, 1990), namely: (1) management choices will have an impact upon the unique package of obstacles and degree of novelty the new venture will face, and (2) management have at their discretion the ability to reduce the degree of novelty through risk reduction strategies that may improve the new venture's chances of survival.

As such, the framework as a tool for developing successful strategies in order to promote survival and growth has to fulfil the following requirements:

- **R3:** The framework will require the user(s) to identify the success criteria and subsequent risks and hence novelties and uncertainties within the domains of the market, production and management that may affect the venture.
- **R4:** The framework will require the user(s) to propose risk reduction strategies to overcome the risks and uncertainties by finding alternative means to acquire the success criteria or mitigating or negating the need for them.
- **R5:** The framework will require the user(s) to assess the engrained industry norms and state how they will overcome the perception of liability of newness with both internal and external stakeholders and communicate the firm's legitimacy.

- **R6:** The framework will require the user(s) to answer under which conditions these risk reduction strategies may increase the risk of failure, and how such risks could be identified and subsequently managed.
- **R7:** The framework will require the user(s) to assess and confirm the legitimacy of the information, in other words, whether the information is truly relevant or a function of the firm's novelty and limited absorptive capacity (related to **R1**).

3.8 New Venture Growth Factors

The purpose of this section is to understand the various factors that affect the growth of a new venture.

In order to derive an understanding of SME growth, one first requires an understanding of new venture growth, as many SMEs may indeed still be in a period of adolescence or be liable to the risk factors associated with newness.

In their seminal review and extension of new venture survival and growth, Gilbert, McDougall and Audretsch (2006) reviewed literature related to 'emerging', 'start-up', 'new', or 'high- or rapid-growth' ventures, including the studies mentioned above; they concluded that:

> *"the most important predictors of new venture growth include characteristics associated with the entrepreneur or management team, resources, strategy, industry, and organizational structure and systems." (Gilbert, et al., 2006)* p. 928)

Gilbert, et al., (2006) also extended the literature review to include modes of growth, namely internal vs external as well as domestic vs international market focus. The following section will briefly review the dominant factors identified and their supporting mechanisms relating to the growth of new ventures.

Entrepreneur and Management Team

- The heterogeneity of the team, their knowledge and previous experience, not only related to the industry, entrepreneurship and growing new and small firms, but also

related to having worked together, improves decision making (Amason, et al., 2006) (Cooper, et al., 1994) (Ensley, et al., 2002) and also provides access to partnership and resources (Kirzner, 1983).

Resources

- The most influential resource growth factors (Cooper, et al., 1994) (Gilbert, et al., 2006) include (1) financial resources due to the ability of such resources to acquire other resources and provide resource slack to pursue new opportunities, and (2) human resources, as these provide the necessary capabilities required to execute the new venture's decisions and perform certain activities effectively and efficiently.

Geographical Location

- Geographical locations may positively or negatively impact the new venture's survival and growth, as industry clusters can either provide access to human or financial resources or increase competition for a limited number of individuals or capital (Folta, et al., 2006) (Lechner & Dowling, 2003) (Hanson, 2000) (Saxenian, 1994) (Baum, et al., 2001).

Strategy

- Business performance and growth are ultimately a function of strategic fit (Pasanen, 2006) (Gilbert, et al., 2006) (Wiklund, et al., 2009), an effective match between the various internal and external factors (for instance, a market opportunity associated with the industry lifecycle external to the firm), and internal drive and capabilities to exploit the market opportunity.

Industry Context

- Companies exploit and ultimately grow from the opportunities and resources that the environment provides (Davidsson, 1989, b). Accordingly, growth is influenced by ease

of market entry (Robinson & McDougall, 2001), competition (Baum, et al., 2001), dynamism, heterogeneity, and lack of price hostility (Zahra & George, 1999).

Organisational Structure and Systems

- Systems and structures enable growth by supporting functional specialisation, formal planning and co-ordination, communication and decision making (Gilbert, et al., 2006) (Kazanjian & Drazin, 1990). Functional expertise increases a business unit's absorptive capacity and allows for improved environmental scanning and associated opportunity recognition to support growth (Box, et al., 1993).

Internal vs External Growth

- Although firms may choose to grow via internal mechanisms, i.e., internal growth via novel innovations that enable firms to enter new markets, or via incremental innovations within the firm's established markets (Amason, et al., 2006), the firm can also pursue external growth via the acquisition of other firms or competitors participating in the same or in a complementary market (Penrose, 1959) (Banbury & Mitchell, 1995). However, external growth may be more difficult, as new or small firms lack funding and a track record (Delmar, et al., 2003).

Local vs International

- With no clear support for local over international growth, evidence suggests that, with the advent of the internet and global logistics networks, new ventures have the ability to seek customers internationally even from inception or earlier on in their lifecycles than what was originally postulated (McDougall, 1989) (Gilbert, et al., 2006).

3.8.1 Integrative Models

Gilbert, et al.,'s review (2006) concluded that all of the factors mentioned above play a critical role in the firm's success, and that they cannot be analysed in isolation.

For instance, Gilbert, et al., (2006) argue that the resources, entrepreneurial characteristics and organisational systems required to pursue local market penetration via innovation may require creativity and technical ability related to the complex process of innovation as well as knowledge related to the market. Alternatively, pursuing external growth via international markets requires a different skillset related to gauging the investments and assets of the acquisition target as well as understanding the local political and socio-political environment and any potential difficulties in integrating the organisational systems and structures.

Gilbert, et al., (2006) thus recommend people to review and understand the success factors needed by the entrepreneur, management team, board of directors or firm to enable growth within the industry context. Gilbert, et al., (2006) also assert that strategic fit, in other words, a match between the necessary success factors and the resources available to the firm, is a dominant determinant of growth.

3.8.1.1 Research Sub-Question

Reviewing the section above allows this dissertation to address the relevant sub-research question (SRQ3) and sub-research objective (SRO3), as summarised in Table 9 below.

Table 9 - SRQ3 and SRO3

CODE	Research Question	CODE	Objective/Solution
SRQ3	What influences new venture and SME growth?	SRO3	Understand the issues affecting a new venture and SME growth.

Having reviewed the above discussion, the dissertation forms the following suppositions: (1) in accordance with the findings of Gilbert, et al., (2006), none of the factors that influence firm growth can be reviewed in isolation; (2) altering a new venture's strategy or target market will affect the required success factors that support growth; (3) through their choice of strategy and target market, entrepreneurs and management can improve the match between the firm's resources and the required success factor(s), and therefore can influence the growth prospects of the firm; and (4) a new venture has at its disposal the means of acquiring these resources other than organically obtaining them.

Consequently, the framework as a tool for developing successful strategies in order to promote survival and growth has to fulfil the following requirements:

- **R8 (related to R1):** The framework will require the user(s) to assess the industry context and identify the market opportunity.
- **R9 (related to R4):** The framework will require the user(s) to identify the success criteria associated with the opportunity in relation to entrepreneur or team characteristics, resources, strategy, industry, and organisational structure and systems.
- **R10 (related to R4):** The framework will require the user(s) to review the alternative means to obtain, mitigate or negate the need for, the success criteria.

3.9 SME Growth Factors

The purpose of this section is to understand the various factors that influence SME growth.

Previous research has revealed that growth is a multidimensional phenomenon and as of yet there is no real consensus regarding the factors leading to growth and success (Pasanen, 2006). As early as the 1950s, Penrose (1959) concluded that growth is dependent on a firm's age, size and industry affiliation. Since then, several classifications of factors affecting growth have been proposed by numerous authors. In 1991, Davidsson (1991) suggested three conditions for growth, namely: (1) favourable entrepreneurial orientation towards growth, (2) adequate resources at the disposal of the firm to support growth, and (3) a market opportunity for growth. Storey's (1994) seminal review of the literature on SME growth revealed three key variables affecting growth, being: (1) the background of the entrepreneur and his/her subsequent access to resources, (2) the firm itself, and (3) the strategic decisions taken by the firm. Gibbs and Davies (1990) created their own classification of four factors affecting growth. These are: (1) personality factors related to the entrepreneur; (2) firm factors related to the firm's resources; (3) management factors related to strategic decision making; and (4) market factors related to opportunities and constraints within the broader environment in which the business operates.

A high-level categorisation can be presented in the form of growth factors due to internal and external determinants. In the sections that follow, this dissertation will present the dominant viewpoints according to these distinctions, while recognising that the lines may blur at times; for instance, Porter (1980) argues that the external environment in which a business operates may be the function of an internal strategic decision of management to operate in that specific sector.

3.9.1 Internal Determinants

Entrepreneur and Management Team

- Numerous studies discussed by Storey (1994) suggest that growth factors related to the entrepreneur and the management team, their motivation (Delmar, et al., 2003) (Dobbs & Hamilton, 2007) (Wiklund, et al., 2009), background, education (Dobbs & Hamilton, 2007), skillset and the experience (Orser, et al., 2000) (Robson & Bennet, 2000) affect the growth prospects of a company by influencing their ability to make effective decisions (Daily, et al., 2002), obtain funding (Pissarides, 1990), develop strategic relationships and networks (Lechner & Dowling, 2003), allocate limited resources (Zahra & Filatotchev, 2004) and identify and exploit opportunities (Moreno & Casilla, 2007), all of which are critical for growth.

Factors Related to the Firm

- In his review of firm growth, Storey (1994) concluded that firm growth is influenced by the firm's size, age and legal structure. However, arguments around the specific firm related factors are mixed, as discussed in Section 3.7 regarding the liability of newness, and the constructs of adolescence and obsolescence. In integrating the various constructs, researchers determined that the liability of newness, adolescence and obsolescence are complementary phenomena, and that failure rate depends on whether time increases overall learning and firm level knowledge or not (Abetcola, et al., 2012). As such Baum, et al., (2001) advise firms to understand which factors would cause their firm to experience one of the constructs and to realise that subsequent

growth would be the result of effectively addressing such factors; for example, it might mean understanding that, as firms age, they are at risk of not innovating new products and thus becoming obsolescent, and that an effective R&D strategy is required to maintain relevance within the market.

Strategy

- Evidence related to strategy is inconclusive regarding the best course of action for achieving growth. Evidence suggests that entrepreneurial orientation, the ability to identify and take on risk to exploit market opportunities (Lumpkin & Dess, 2001) (Wiklund, et al., 2009), flexibility (Dobbs & Hamilton, 2007), and product novelty (Freel & Robson, 2004) are generally positively correlated to growth; however, there is no consensus as to which strategic orientation underpins high growth firms, i.e. niche, low cost, differentiation, etc.

Due to the varied results and arguments, authors in the reviewed literature propose that strategies should be adopted to balance the firm's internal and external conditions on a case by case basis. Chaganti, et al., (2002) found that, under different market conditions, distinctly different strategies are successful, in contrast to their findings for larger firms, where firms compete on primarily the same aspects within their markets. Weinzimmer, et al., (1998) propose that strategic fit is the most important determinant of growth. The concept of strategy will be covered in greater detail in Chapter 4.

3.9.2 External determinants

Counter to the internal factors affecting growth, the ecological perspective argues that the firm operates within a larger business environment that significantly dictates its ability to grow (Hannan & Freeman, 1989). The argument surrounding the impact of the external environment on growth is based on the notions (1) that demand for the firm's product is the source of firm growth (Capon, et al., 1990) (Davidsson & Delmar, 2006) and (2) that the general business environment has an impact on the ability of an SME to conduct business

(Kangasharju, 2000), taking into account the level of competition, (Davidsson, et al., 2010) and the availability of resources and suppliers (Dahlqvist, et al., 2000).

3.9.3 Growth Barriers

Even with the recognition that SMEs are vital to stimulating entrepreneurship and therefore economic growth, a number of obstacles inhibit SMEs from realising their full potential. These barriers vary across space and time and are also dependent on the firm's growth ambitions and industry sector. The dominant factors cited include regulatory hurdles (Gockel & Akoena, 2002), and a lack of access to managerial skills and consultants (Cassar, 2004) (Cook & Nixson, 2000) (Kayanula & Quartey, 2000) (Martin & Staines, 2008), funding, equipment and technology (Phillips & Wade, 2008), networks (Okten & Osil, 2004) (Shane & Cable, 2002) and international markets (Gockel & Akoena, 2002).

3.9.4 Integrated Models

Considering all the arguments presented in the discussion above, growth is clearly a multidimensional phenomenon, largely the result of willingness and skill, although the business environment itself cannot be ignored. Davidsson and Delmar (2006) found that high growth firms, where the management team was highly motivated, found ways to achieve growth regardless of the business environment, whereas other high growth firms oscillated in sync with the general economy.

A number of authors have attempted to theorise growth by combining the internal and external factors. Sandberg and Hofer (1987) proposed that growth was the result of: (1) the business environment, (2) the firm's strategy, and (3) the entrepreneur. Chrisman, Bauerschmidt and Hofer (1998) further developed this model by considering the following: (4) resources at the disposal of the company, (5) the organisational structure and its ability to be flexible to exploit market opportunities, and (6) systems and processes to maintain control and deploy the company's strategy to achieve the company's goals. According to Chrisman, Bauerschmidt and Hofer (1998), p. 21):

> *"new venture performance is a function of the critical decisions and behaviors of entrepreneurs in recognizing entrepreneurial opportunity, assembling resources needed to pursue opportunity, developing a strategy to align resources to exploit opportunity, and designing an organization capable of putting the strategy into action."*

The lack of consensus among researchers in creating a single model as proposed above is attributed to a lack of explanatory power amongst the proposed models: "while existing studies manage to give an answer to the question of how different determinants affect growth, they largely fail to explain the underlying processes of why these determinants might affect growth" (Davidsson, et al., 2010), p. 95). As such, these models are mainly descriptive, with researchers critiquing their colleagues for building quantitative models to determine the impact of each factor on growth rather than explaining why growth is a consequence to the factor (Fuller & Moran, 1999). As such these researchers are being criticised for engaging in theory-testing research rather than theory-building research (Meredith, 1993).

In an attempt to address the shortcomings of the models proposed above, two recent propositions have been enjoying both support and critique (Davidsson, et al., 2010). The first is that of Fuller and Moran (1999), who propose that small enterprises should be modelled as complex adaptive systems, while a second subsequent proposition is made by Wiklund,, et al., (2009), who incorporated Fuller and Moran's thoughts in their own integrative model of firm growth.

Fuller and Moran's (1999) model came into existence due to their frustration with the reductionistic methodologies employed by researchers and the fact that subsequent models were unable to explain the relationship and interdependence between factors. Fuller and Moran (1999) propose that, given that it is widely recognised that small businesses are part of a complex network of economic actors (Lewin & Regine, 1999), they should be modelled as such.

Fuller and Moran (1999) thus propose that SMEs fluctuate between patterns of order and chaos, that the state of order is far from equilibrium and that the movement from one state

to another does not have to be initiated by an external cause or catastrophe. In living complex systems, this type of self-ordering, or self-organisation, stems from the concept of adaptation and implies learning (Mingers, 1995). Moreover, whether conscious or unconscious (relating to planned and emergent strategy, a topic to be covered in greater detail in Section 4.3.3), this results in greater fitness, which is synonymous with survival (Kauffman, 1995). The concept of self-organisation further implies the emergent property of patterning whereby, as is the case with flocks of birds, certain patterns become evident amongst SMEs, i.e., relatively known growing pains or obstacles associated with a level of development (relating to growth stage models covered in greater detail in Section 3.10). These properties suggest that the analogy of a complex adaptive system can provide a conceptual framework for understanding or illuminating the dynamics of small enterprises (Fuller & Moran, 1999).

Incorporating Fuller and Moran's (1999) criticism of current growth models, Wiklund, et al., (2009) proposed their own integrative growth model utilising the five different perspectives of: (1) entrepreneurial orientation, (2) external environment, (3) internal resources, (4) growth attitude and (5) strategic fit. They illustrated how each perspective related to one or more of Fuller and Moran's (1999) ontological layers, and showed that the interactions of these five perspectives were indeed complex, systemic and changing. A central theme of Wiklund, et al.,'s (2009) model is the relationship of the entrepreneurial orientation of the firm, which itself is a consequence of the SME manager's attitude towards growth and towards the internal and external determinants of growth. The following section will provide a brief overview of each perspective.

Within Wiklund's model, owner attitude refers to the business owner's motive for starting and operating his/her business, as studies have shown that people have a variety of reasons for doing so beyond financial incentives (Storey, 1994). Wiklund and Shepherd (Wiklund & Shepherd, 2003) proposed that, even though growth may not have been an entrepreneur's initial goal, if the business owner should be favourably exposed to the new tasks that accompany business growth, they may develop a more positive attitude towards growth.

In turn, Wiklund, et al., (2009) argue that the owner's attitude and motivation for growth do affect their entrepreneurial orientation. Wiklund, et al., (2009) defined entrepreneurial

orientation as a firm's "willingness to innovate in order to rejuvenate market offerings, take risks in order to try out new and uncertain products, services and markets, and to be more proactive than competitors toward new marketplace opportunities" (Wiklund, et al., 2009), p. 10). The link between entrepreneurial orientation and growth is well established (Covin & Slevin, 1990) (Wiklund, 1999), as proactive firms can establish first mover advantages to dominate distribution channels, establish brand recognition and credibility, charge higher prices in the absence of competition and establish footholds in sought after market segments. Wiklund, et al., (2009) propose that a high level of entrepreneurial orientation is important for firm survival and growth, as firms need to identify new opportunities and derive multiple income streams in a world with shortening product and business model life cycles.

The external environmental perspective of Wiklund, et al.,'s (2009) model is in agreement with the literature, namely, that companies exploit and hence grow from the opportunities and resources that the environment provides (Davidsson, 1989, b). Growth is supported in growing emerging markets, as resources are more abundant here, and mistakes are not as costly as in mature, highly competitive markets (Castrogiovanni, 1991). Business growth is also affected by geographic location due to the inequality of resources available in different locations of the world and the dependence of businesses on local resources to sustain them (Romanelli & Schoonhoven, 2001). Other environmental characteristics that affect the ability of firms to enter a market and obtain a solid market share include capital requirements (Robinson & McDougall, 2001), competition (Baum, et al., 2001), dynamism, heterogeneity, and lack of price hostility (Zahra & George, 1999). Entrepreneurial orientation relates to the environmental perspective, as entrepreneurial small firms who identify and service unmet market needs, tend to enjoy accelerated growth (Wiklund, et al., 2009).

The internal perspective of Wiklund, et al.,'s (2009) model proposes that the firm has a number of resources at its disposal, and that the ability of individuals within the firm to deploy these resources effectively results in the exploitation of opportunities and subsequent growth (Hafeez, et al., 2002). The ability of a new venture to attract resources is seen as the most critical and difficult task, as the possible lack of reputation and track record is associated with a higher level of risk in the eye of potential resource providers (Brush, et al., 2001).

Wiklund, et al., (2009) adhere to the resource construct as defined by Hall (Hall, 1992), who proposed that a firm's resources include: (1) tangible resources that are assets and include financial and physical assets, (2) intangible resources that are assets and include intellectual property, organisational assets and reputational assets, and finally (3) intangible resources that are knowledge, skills, relationships and capabilities. The configuration of resources required to pursue and exploit an opportunity differs according to the firm's managerial characteristics, resource and network base, and task environment (Mazzarol & Reboud, 2011).

Wiklund, et al., (2009) propose that the variability in beliefs as to which resources or capabilities are critical and the method used to combine them are a function of the team's or the individual's experiences, educational background, social ties, initial financial capital or cognitive variability in the individual's ability to combine concepts and information into new ideas (Brush, et al., 2001).

Wiklund, et al., (2009) are in agreement with evidence from literature that growth is synonymous with the ability of the entrepreneur and/or the management team to attract and access the necessary resources and institutionalise the right structures to develop and utilise these resources to their full potential. Entrepreneurial orientation relates to the internal perspective whereby firms who actively try to "integrate, reconfigure, gain and release resources" (Eisenhardt & Martin, 2000, p. 1107) are able to create, discover and exploit new market opportunities and hence achieve growth.

Given the mixed results with regard to the best strategy to follow, Wiklund, et al., (2009) support the strategic fit paradigm, which proposed that performance and growth are ultimately a function of strategic fit (Gilbert, et al., 2006)(Pasanen, 2006) (Wiklund, et al., 2009), an effective match between the various internal and external factors, i.e., a market opportunity external to the firm, and internal drive, capabilities and flexibility to exploit the market opportunity. Entrepreneurial orientation relates to the strategy perspective, in that business growth rarely occurs by chance but rather is due to management's choices and subsequent conscious decisions related to the activities of 'identifying, planning and implementing' to pursue and exploit opportunities.

Consequently, Wiklund, et al., (2009) emphasise their belief that strategy may be the dominant determinant of growth, as it brings the other four perspectives together to result in competitive advantage and subsequent growth. Strategy therefore has two important implications, namely: (1) strategic choice defines the unique set of obstacles that will be faced by the firm and therefore affects strategic fit, (2) strategic planning and management bridge the firm's current resources and its future requirements based on its growth objectives. Strategic planning is thus recognised as a critical success factor, as it reduces uncertainty, ensures that alternatives are considered, and improves the chances of strategic fit and therefore growth (Davidsson, et al., 2010).

3.9.5 Growth Modes

Beyond profit-seeking, the firm may be induced to grow via a number of strategies in response to internal and external factors. Such inducement to grow may include growing demand within a certain market, technological advancements, discoveries and inventions, as well as factors that may negatively affect the company unless the company can protect itself by employing a growth strategy (Davidsson, et al., 2010).

The growth strategies at their disposal include (Dsouza, 1990): (1) building strategy, i.e. vertical integration and absorbing more activities within the value chain; (2) expanding strategy, i.e. entering new markets or product segments; and (3) maintaining strategy, i.e. placing an emphasis on market dominance through efficiency, innovation and product differentiation within their current operating segment.

Thompson (2001) argues that SMEs have four options at their disposal to realise these strategies through: (1) organic growth; (2) acquisition; (3) strategic alliance; and (4) joint venture. However, studies have produced mixed results in this regard, with theorists being unable to agree on a best course of action to accelerate growth (Pasanen, 2006).

The choice of growth mode carries with it varying degrees of business risk, as illustrated in Figure 16 below (Lynch, 2000), along with associated resources to affect the growth strategy. Accordingly, should a firm move away from its base market or product segment, it runs the

risk of operating in areas where it has limited knowledge (novelties) of the key success factors, and hence limited ability to provide strategic leadership to steer the company towards acquiring the necessary resources and thus ensure business success.

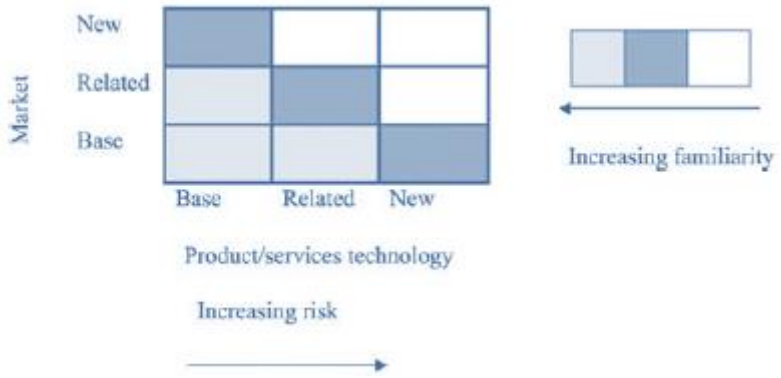


Figure 16 - Familiarity and Risk (Lynch, 2000, p. 419)

The concept of growth mode therefore is an extension of the 'liability of newness' construct, whereby management's choice of which growth mode to pursue, will influence the set of obstacles and degree of novelty the firm will have to overcome. Similarly to the concept of 'liability of newness', the success of the growth mode will be determined by the firm's ability to employ risk reduction strategies to overcome the firm's obstacles and novelties associated with the chosen growth mode.

3.9.6 Research Sub-Question

Reviewing the section above allows this dissertation to address the relevant sub-research questions and sub-research objectives, as contained in Table 10 below.

Table 10 - SRQ3, SRO3, SRQ4 and SRO4

CODE	Research Question	CODE	Objective/Solution
SRQ3	What influences new venture and SME growth?	SRO3	Understand the issues affecting a new venture and SME growth.
SRQ4	How does strategy influence new venture and SME survival and growth?	SRO4	Introduce and understand the possible impact of formal strategy processes on a new venture and on SME survival and growth.

After reviewing the section above, the following supposition is formed in accordance with findings of Wiklund, et al., (2009), closely resembling those determined from new venture survival and growth, namely: (1) growth is determined by the entrepreneur's motivation and subsequent entrepreneurial orientation; (2) growth is predominantly a function of strategic fit, i.e., the existence of an external market opportunity and access to the resources to exploit this opportunity; (3) the entrepreneur and management's strategic choice influences strategic fit, the resources required to effect growth, and therefore the chances of survival and growth; (4) the entrepreneur or management team should continually strive to "integrate, reconfigure, gain and release resources in order to create, discover and exploit new market opportunities" (Eisenhardt & Martin, 2000, p. 1107); and (5) entrepreneurs and management have alternate means at their disposal to gain access to the necessary resources. In this regard, it should be noted that SMEs find it difficult to employ these alternate methods; this issue will thus be addressed in Section 4.4.3, which will look at how formal strategies can help communication between internal and external stakeholders and aid the acquisition of resources at the disposal of potential partners and financiers.

Given the above discussion, the framework as the tool for developing successful strategies in order to promote survival and growth has to fulfil the following requirements:

- **R11:** The framework will require the user(s) to identify the external market opportunity (related to **R1 and R8**).
- **R12:** The framework will require the user(s) to identify the internal resources required to exploit the opportunity (related to **R2** and **R9**).
- **R13**: The framework will require the user(s) to identify the possible means of acquiring these resources, or negating the need for them (related to **R5** and **R11** and critically taking into account **R6**).
- **R14**: The framework will require the user(s) to identify the requirements of possible partners and financiers to part with their resources and the means of acquiring these resources.
- **R15:** The framework will require the user(s) to demonstrate their motivation and entrepreneurial orientation to achieve growth, and, once they have exploited the

current opportunity, how they can utilise the resource base to pursue new opportunities (related to **R3** and **R7**).

3.10 Growth Stage

The purpose of this section is to explore the arguments surrounding the concept that SME pass through a number of stages throughout their lifecycle.

The risks associated with a growing venture change as it develops, with the initial risk being that of developing a strategic fit between the firm's internal capabilities and achieving market adoption related to the external opportunity, which thereafter shifts to addressing issues associated with growth and scaling up the business, to finally whether the resource base can be used to exploit new opportunities (Snyman & Kennon, 2013).

Accordingly, numerous authors (Davidsson, et al., 2010)(Levie & Lichtenstein, 2008)(Phelps & Adams, 2007) have spent considerable effort on understanding and mapping the growth process. The dominant method of articulating the growth process has been by using organismic metaphors of 'life cycles', in terms of which a company passes through a number of stages market by 'trauma' or 'crises' from birth to maturity, revitalisation or death (Davidsson, et al., 2010).

Like all models, these stages were identified by reducing complex and voluminous data in a quest for pattern recognition, configurations and sense making (Levie & Lichtenstein, 2008). Consequently, the model has enjoyed immense support due its intuitive appeal, its resonance with the manager's perceptions of reality, and its powers to explain and predict problems and management needs in growing organisations (Davidsson, et al., 2010).

The stage model perspective has come under intense scrutiny, however, due to the construct that the stages are distinct, predetermined and sequential and therefore predictable. Levie and Lichtenstein (2008), in a review of 104 publications on stage models, found that authors prescribe from 3 to 11 distinct stages. The lack of agreement among the authors led them to

conclude that the only aspect that stands up to scrutiny is the fact that organisations display distinguishable configurations at different times in their history (Levie & Lichtenstein, 2008).

Despite critique of the stage model perspective, the intuitive appeal and power of the concept to explain and understand organisational growth has led authors to distance themselves from the concept of distinct stages and a fixed linear sequence of growth to adopt a more multidimensional concept and establish the problem or states perspective, in response to the argument made by Levie and Lichtenstein (2008). These two authors recognised that changing two assumptions in a dynamic states model has far greater explanatory power than its stage model precursor; and by changing these two propositions most of the current dissent in the field could be addressed. These two propositions are: 1) that businesses develop through a specific number of stages, and 2) that these stages represent a sequenced program of development. These two propositions directly follow from the assumption that organisations develop as if they were organisms, which reflects a biological foundation of theory development.

The dynamic states model at its foundation uses an open systems framework (Ashmos & Huber, 1987) that is based in complexity theory (Anderson, 1999) (Lichtenstein, et al., 2007) in order to capture the truth that business organisations are dependent on their environment for survival. In that framework, the firm possesses a number of resources (both tangible and intangible), and convert inputs into products or services to provide value to a customer and a market segment (Ardichvili, et al., 2003).

In the framework, as illustrated in Figure 17, the process of value-creation is enacted via the firm's business model, which describes the configuration of activities, resources and strategies to capitalise on the market opportunity or survive within the environment (Zott & Amit, 2008) (business models will be covered in greater detail in Section 4.6.1.3). The business model or 'configuration' therefore alters, as the environment or 'fitness landscape' changes, with each configuration being known as a 'dynamic state'. As is the case with the stages theory, these changes or configurations may be linear and are somewhat 'predictable' (Levie & Lichtenstein, 2008).

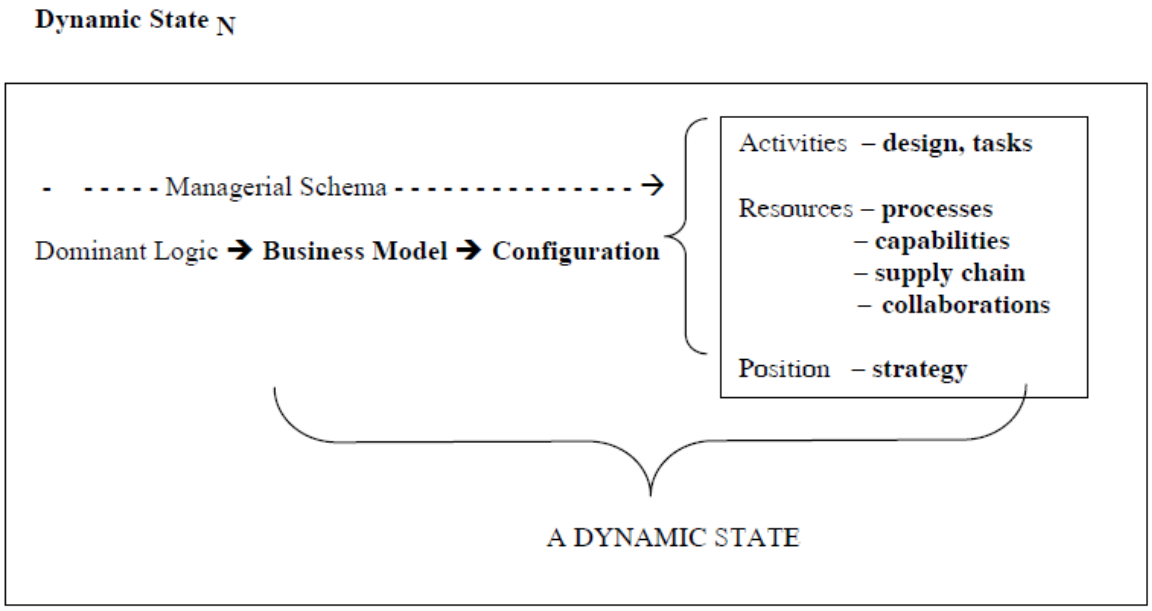


Figure 17 - Elements of a Dynamic State (Levie & Lichtenstein, 2008, p. 26)

The dynamic states model, however, differs from the stages theory in two significant ways (Levie & Lichtenstein, 2008). The first deviation is due to the relationship between the business model on the one side and the environment on the other: as both sides of the equation can change ad infinitum, there is no set number of states in an organisation's existence. The second deviation is that the states may occur in any number of sequence and therefore there is no set lifecycle. By relaxing the need to identify the number and sequence of stages, proponents of the states model suggest that the predictive power lies in answering the questions:

> *"How is a given dynamic state – and its associated business model – more or less effective in certain conditions? And how are various progressions of states related to knowable environmental conditions?" (Levie & Lichtenstein, 2008)*, p. 27)

3.10.1 Research Sub-Question

A review of the section above allows this dissertation to contribute to addressing the relevant sub-research questions and sub-research objectives, which are reiterated in Table 11 below for ease of reference.

Table 11 - SRQ4, SRO4, SRQ5 and SRO5

CODE	Research Question	CODE	Objective/Solution
SRQ3	What influences new venture and SME growth?	SRO3	Understand the issues affecting a new venture and SME growth.
SRQ4	How does strategy influence new venture and SME survival and growth?	SRO4	Introduce and understand the possible impact of formal strategy processes on a new venture and on SME survival and growth.

Reviewing the sections above, the following supposition is adopted in accordance with the dynamic states perspective, namely that SMEs do not progress linearly through a pre-determined number of stages, but that, during an SME's life, a certain set of 'knowable' (patterned) obstacles will have to be overcome, that these obstacles are a function of the SME's strategy, business model and level of development, and that power lies in identifying these obstacles and management needs ahead of time and finding suitable measures to address or negate them.

Consequently, the framework as a tool for developing successful strategies in order to promote survival and growth has to fulfil the following requirements:

- **R16:** The framework will require the user(s) to identify the firm's future obstacles and management needs associated with the firm's growth and development (related to **R3**, **R9** and **R12**).
- **R17:** The framework will require the user(s) to identify the possible means of overcoming or negating these obstacles and needs (related to **R4, R10** and **R13** and critically taking into account **R6**).

3.11 Requirement Consolidation

The purpose of this section is to carry out the methodology described in Section 2.8.2 and consolidate any overlapping requirements developed within the chapter, with the subsequent encompassing requirements informing the final solution conceptualisations.

With the study adopting the systems thinking approach and utilising systems engineering as the research method, as illustrated in the research design below (Figure 18), the following section will effect the first 3 steps of Jabareen's (2009) framework development methodology as discussed in Section 2.6.4, by developing a set of solution requirements associated with the domain of SME survival and growth that must be met by the emergent framework.

From the chapter and the requirements derived from the reviewed literature, it is evident that a number of characteristics that support survival and growth, as indicated by the various requirements, are synonymous between the various domains and theories reviewed. In order to eliminate overlap and provide clarity, the various requirements need to be consolidated as per Jabareen's (2009) methodology.

The process of consolidation was one of determining the overlap between the various requirements, identifying unifying constructs or themes, and subsequently formulating new encompassing requirements (designated by the prefix S&G), which address the overlapping requirements. In comparing the new and the original requirements, a matrix was utilised (Figure 19) to verify that all of the original requirements are addressed by the new requirements.

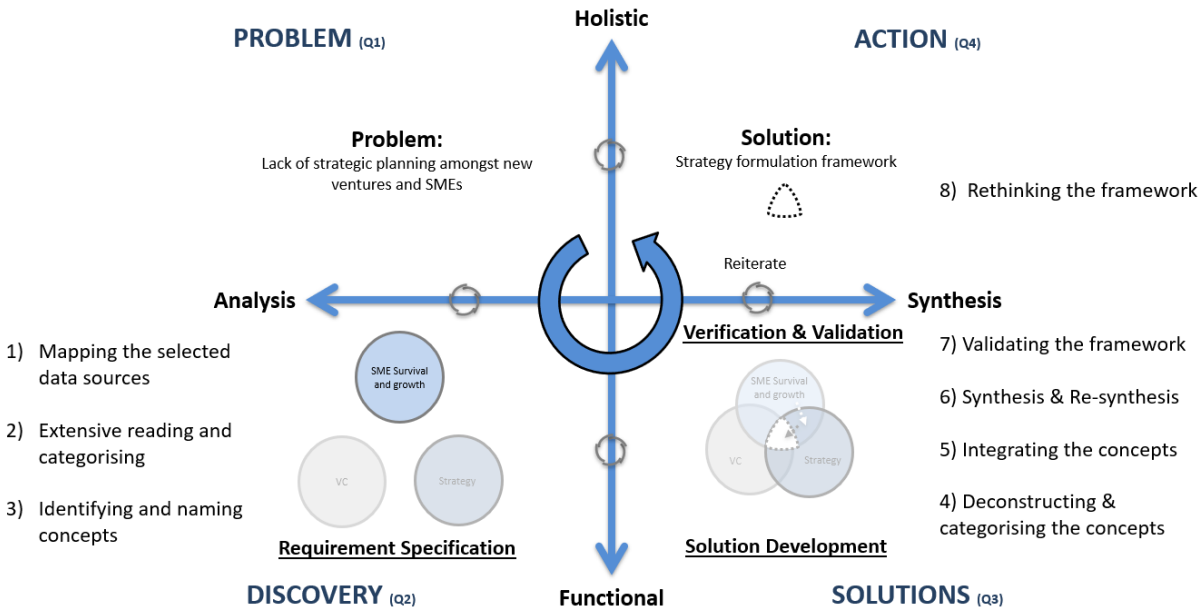


Figure 18 - Research Design & SME Survival And Growth

For ease of reference the original requirements, as extracted from the reviewed literature, are listed below:

- **R1:** The framework will require the user(s) to define the firm's cognitive model, i.e., what they believe to be true and how they have come to adopt these beliefs, relating to:
  - the current and future information asymmetry, which will allow them to exploit the price mechanism;
  - the knowledge asymmetry, which will give them a transaction cost advantage now and for some time in the future, until the same knowledge is acquired by competitors.
- **R2:** The framework will require the user(s) to re-assess and challenge their cognitive model, as new information is absorbed.
- **R3:** The framework will require the user(s) to identify the success criteria and subsequent risks and hence novelties and uncertainties within the domains of the market, production and management that may affect the venture.
- **R4:** The framework will require the user(s) to propose risk reduction strategies to overcome the risks and uncertainties by finding alternative means to acquire the success criteria or mitigating or negating the need for them.
- **R5:** The framework will require the user(s) to assess the engrained industry norms and state how they will overcome the perception of liability of newness with both internal and external stakeholders and communicate the firm's legitimacy.
- **R6:** The framework will require the user(s) to answer under which conditions these risk reduction strategies may increase the risk of failure, and how such risks could be identified and subsequently managed.
- **R7:** The framework will require the user(s) to assess and confirm the legitimacy of the information, in other words, whether the information is truly relevant or a function of the firm's novelty and limited absorptive capacity (related to **R1**).
- **R8 (related to R1):** The framework will require the user(s) to assess the industry context and identify the market opportunity.

- **R9 (related to R4):** The framework will require the user(s) to identify the success criteria associated with the opportunity in relation to entrepreneur or team characteristics, resources, strategy, industry, and organisational structure and systems.
- **R10 (related to R4):** The framework will require the user(s) to review the alternative means to obtain, mitigate or negate the need for, the success criteria.
- **R11:** The framework will require the user(s) to identify the external market opportunity (related to **R1 and R8**).
- **R12:** The framework will require the user(s) to identify the internal resources required to exploit the opportunity (related to **R2** and **R9**).
- **R13**: The framework will require the user(s) to identify the possible means of acquiring these resources, or negating the need for them (related to **R5** and **R11** and critically taking into account **R6**).
- **R14**: The framework will require the user(s) to identify the requirements of possible partners and financiers to part with their resources and the means of acquiring these resources.
- **R15:** The framework will require the user(s) to demonstrate their motivation and entrepreneurial orientation to achieve growth, and, once they have exploited the current opportunity, how they can utilise the resource base to pursue new opportunities (related to **R3** and **R7**).
- **R16:** The framework will require the user(s) to identify the firm's future obstacles and management needs associated with the firm's growth and development (related to **R3**, **R9** and **R12**).
- **R17:** The framework will require the user(s) to identify the possible means of overcoming or negating these obstacles and needs (related to **R4, R10** and **R13** and critically taking into account **R6**).

Accordingly, the dissertation developed the following encompassing requirements (see Table 12 below) associated with the survival and growth (S&G) of SMEs.

Table 12 - SME Survival and Growth Consolidated Requirements

New Requirement Identifier	Rationale
S&G – 1	**Related Original Requirements:** R15 **Unifying theme or construct:** Motivation **Requirement:** The framework will require the user(s) to state their motivation for growth and willingness to engage in entrepreneurial actions. **Theoretical Foundation:** Integrative Model of Firm Growth (Section 3.9.4) **Motivation:** Survival and growth rarely occur by chance but are due to the motivation of the entrepreneur and management to achieve growth and engage in the activities that support growth, i.e. overcoming obstacles, identifying new information and opportunities etc.
S&G – 2	**Related Original Requirements:** R1, R8, R11 **Unifying theme or construct:** Market Opportunity **Requirement:** The framework will require the user(s) to identify and justify the information asymmetry about the market opportunity from a demand and supply (transaction cost) perspective. **Theoretical Foundation:** Theory of the Firm (Section 3.5) **Motivation:** Survival and growth are a function of exploiting an external market opportunity, with the successful exploitation being a function of competition, i.e., the degree to which competition is unaware of the opportunity and the means to exploit it from a transaction cost perspective.
S&G – 3	**Related Original Requirements:** R3, R9, R12 **Unifying theme or construct:** Adoption **Requirement:** The framework will require the user(s) to identify the means to transfer knowledge to the right customers as to the benefits and legitimacy of the offering. **Theoretical Foundation:** Liability of Newness (Section 3.7) **Motivation:** Survival and growth require market adoption, which in turn is a function of the market recognising (absorbing knowledge) the value and legitimacy of the firm's offering, i.e., the fact that the offering is desirable, proper, and appropriate within the socially accepted norms or beliefs.
S&G – 4	**Related Original Requirements:** R1, R3, R9, R12 **Unifying theme or construct:** Execution **Requirement:** The framework will require the user(s) to identify the information asymmetry and required success criteria relating to execution of the opportunity.

New Requirement Identifier	Rationale
	Theoretical Foundation: Theory of the Firm (Section 3.5) & Liability of Newness (Section 3.7) **Motivation:** Survival and growth are reliant on an internal capability to execute upon an opportunity better than the competition, which has associated service or product benefits, i.e. speed, cost, etc.
S&G – 5	**Related Original Requirements:** R4, R6, R10, R13, R6 **Unifying theme or construct:** Resource **Requirement:** The framework will require the user(s) to identify risk reduction strategies to overcome risks and resource shortcomings and evaluate under which circumstances these strategies will fail. **Theoretical Foundation:** Liability of Newness (Section 3.7) **Motivation:** Risk reduction strategies are actions, which address knowledge novelties and improve an SME's chances of survival and growth. However, risk reduction strategies are not absolute, and therefore the firm has to assess under which conditions risk reductions may in fact increase the firm's risk of failure.
S&G – 6	**Related Original Requirements:** R5, R14 **Unifying theme or construct:** Legitimacy **Requirement:** The framework will require the user(s) to identify the means of demonstrating the legitimacy of the opportunity and the firm to internal and external stakeholders. **Theoretical Foundation:** Liability of Newness (Section 3.7) **Motivation:** The perception of legitimacy associated with the firm's structure and offering affects its ability to gain access to resources under the control of internal and external stakeholders, such as employees, partners and financiers.
S&G – 7	**Related Original Requirements:** R1, R2, R7 **Unifying theme or construct:** Cognitive **Requirement:** The framework will require the user(s) to identify how they can justify their knowledge or beliefs related to an existing opportunity, and how they will be able to identify new information related to their knowledge set and modify it accordingly. **Theoretical Foundation:** Theory of the Firm (Section 3.5) **Motivation:** Knowledge is the underlying DNA, which binds the firm together, with the recognition, creation and modification of such knowledge influencing the actions of the firm and therefore the successful identification and execution of opportunities.
S&G – 8	**Related Original Requirements:** R3, R4, R9, R10, R12, R13, R16, R17

New Requirement Identifier	Rationale
	Unifying theme or construct: Scaling **Requirement:** The framework will require the user(s) to identify future obstacles as the business grows, and to understand as well as decide how and when they will address them. **Theoretical Foundation:** Growth Stage (Section 3.10) **Motivation:** Firms are faced with a set of 'predictable' obstacles as they grow, with power lying in the ability to identify these obstacles and address them appropriately, so that they do not affect the survival and growth of the firm.
S&G – 9	**Related Original Requirements:** R1, R2, R7 **Unifying theme or construct:** Opportunity **Requirement:** The framework will require the user(s) to identify how they will identify new knowledge related to new opportunities. **Theoretical Foundation:** Integrative Model of Firm Growth (Section 3.9.4) **Motivation:** Growth is a function of the entrepreneurial activity of continually pursuing new opportunities, which requires the firm to be receptive to and able to identify and absorb new information.
S&G – 10	**Related Original Requirements:** R3, R7, R15 **Unifying theme or construct:** Expansion **Requirement:** The framework will require the user(s) to identify how they will exploit their resource base to pursue new opportunities. **Theoretical Foundation:** Growth Mode (Section 3.9.5) **Motivation:** With it being understood that the continued pursuit of opportunities results in growth and therefore survival, should the firm have successfully pursued an opportunity, it would have access to additional resources (certain success criteria associated with the opportunity), which it could leverage as the success criteria (or partial success criteria) to pursue related or new opportunities.

In the matrix in Figure 19 below, the new encompassing requirements on the vertical axis were compared to the original requirements derived from the reviewed literature on the horizontal axis. The matrix verifies that each of the new requirements correspond to and address at least one of the original requirements derived from theory. The consolidated requirements derived above are functional requirements as categorised by Van Aken, et al., (2006)(see Section 2.5) as they dictate performance demands and specific functions the

framework has to accomplish, i.e., specific results the framework has to deliver. Accordingly, these encompassing requirements will inform the ultimate solution conceptualisations, which are derived in Part 3 of this document.

New Encompassing Requirements		Original Requirements Derived from Literature																
Requirement ID	Unifying Construct	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Count
S&G - 1	Motivation															•			1
S&G - 2	Market	•							•			•							3
S&G - 3	Adoption			•						•			•						3
S&G - 4	Execution	•		•						•			•				•		5
S&G - 5	Resource				•		•				•			•					4
S&G - 6	Legitimacy					•									•				2
S&G - 7	Cognitive	•	•					•											3
S&G - 8	Scaling			•	•					•	•		•	•			•	•	8
S&G - 9	Opportunity	•	•					•											3
S&G - 10	Expansion			•				•								•			3
	Count	4	2	4	2	1	1	3	1	3	2	1	3	2	1	2	2	1	

Figure 19 - SME Survival and Growth Requirement Comparison Matrix

The consolidated requirements derived above are functional requirements as categorised by Van Aken, et al., (2006)(see Section 2.5) as they dictate performance demands and specific functions the framework has to accomplish, i.e., specific results the framework has to deliver.

3.12 Chapter Conclusion

In accordance with the methodology this chapter answered all of the relevant sub-research questions and achieved all of the sub-objectives associated with SME survival and growth as illustrated inTable 13, by providing background to the theory of the firm, the definition of an SME, the 'liability of newness' construct and the factors that affect SME survival and growth. The dissertation recognises that the firm consists of a pool of resources with knowledge at the core, with SMEs characteristically subject to obstacles in the face of a lack of resources.

The liability of newness concept revealed that survival is a function of acquiring knowledge and overcoming novelty (ignorance and/or lack of knowledge), as well as a perception of illegitimacy through the strategic actions of the firm or the entrepreneur. Novelty, however, is always in a state of constant flux due to changing internal and external conditions, which demand new knowledge related to the required success factors within the changing environment.

SMEs are subject to a number of internal and external factors, with ultimate survival and growth being a function of strategic fit, i.e., the match or fit between the internal ability to execute upon an external opportunity. Strategic fit in turn is subject to (1) the firm's strategic choice, as the strategic choice of the firm will determine the novelties and obstacles it will face, as well as (2) the firm's entrepreneurial orientation and actions to overcome these obstacles and secure the necessary success factors, which will improve its chances of survival and growth.

The considerations that have to be taken into account in developing a tool, which will allow the firm to assess its strategic choices, determine relevant success criteria and identify actions to overcome novelties and obstacles, were captured in the requirements, which were derived throughout the chapter. These requirements were subsequently consolidated in Table 12 and will inform the formulation of the final solution.

Table 13 - Sub-Research Question and Sub-Objective Completion

CODE	Research Question	CODE	Objective/Solution	Section(s) Answered /Achieved
SRQ1	What constitutes a firm?	SRO1	Understand the theory that underpins our understanding of the firm and the firm's growth.	3.5.1
SRQ2	What influences a new venture and SME survival?	SRO2	Understand the issues affecting a new venture and SME survival.	3.7.1
SRQ3	What influences new venture and SME growth?	SRO3	Understand the issues affecting a new venture and SME growth.	3.8.1.1 & 3.9.6 & 3.10.1
SRQ4	How does strategy influence new venture and SME survival and growth?	SRO4	Introduce and understand the possible impact of formal strategy processes on a new venture and on SME survival and growth.	3.9.6 & 3.10.1

Chapter 4 – Strategy

The purpose of this chapter is to explore the arguments in favour of formal strategy formulation as a mechanism that supports SME survival and growth.

4.1 Introduction

The term 'strategy' is derived from the Greek word '*strategos*' meaning 'art of the general' (Collis, 2005). Sun Tzu, the famous Chinese military general, proclaimed that the responsibility of a general was to create positions that assure victory (Griffith, 1963). As discussed previously, the ability to 'create' situations of victory or success is extremely important to SMEs, whose inherent characteristic is a lack resources (Ates, 2008); moreover, in the case of entrepreneurial SMEs, which are continuously in pursuit of opportunities beyond their means (Stevenson, 1983).

In order to understand the arguments for formal strategy formulation in SMEs and the success criteria of such a process, this dissertation first has to establish (1) an understanding of the success criteria of strategy formulation, (2) which, if any, of these criteria apply to SMEs, (3)

the current strategy process commonly used in SMEs and (4) the more effective strategy formulation processes in SMEs.

Should this chapter reveal the need for the continued pursuit of a strategy formulation framework, and in accordance with the methodology, Chapter 6 will review the synthesis between the factors that affect SME survival and growth and successful strategy formulation. In order to review the research domains 1 through 4 above, this chapter will aim to answer the following sub-research questions and set out to achieve the sub-objectives (see Table 14 below) in order to answer the primary research question:

How can an SME be guided to formulate a strategy?

Table 14 - Research Questions SRQ5 to SRQ8 and Objectives SRO5 to SRO8

Domain	CODE	Research Question	CODE	Objective/Solution
Strategy Formation and Formulation	SRQ5	What is strategy and what is strategic management?	SRO5	Define and understand the purpose of strategy and strategic management.
	SRQ6	How are strategies formed?	SRO6	Understand how strategies are successfully formed.
	SRQ7	Should SMEs formulate strategies?	SRO7	Define the supporting arguments related to formal strategy formulation in SMEs.
	SRQ8	How are successful strategies formed in SMEs?	SRO8	Define the requirements for successful strategy formulation in SMEs.

4.2 Strategic Management

The purpose of this section is to explore strategic management as the domain within which strategy and strategy formulation are a sub-element.

The lineage of strategic management can be traced back to the 1960s (Furrer & Thomas, 2007), with the likes of Chandler (1962) and Ansoff (1965) underscoring the importance of the topic. The definition, tasks and scope of strategic management have been debated over

the years, but the basic premise is that strategic management is concerned with the long-term survival of a company in order to achieve the company's mission and goals, with planning, running and changing the company being central tasks in this undertaking (Porter, 1996) (Grant, 2003) (Mintzberg, 1979) *(*Meyer *&* de Wit*, 20*10) (Teece, 1990) (Whittington, 1993).

Schendel and Hofer (1979) proposed that strategic management is comprised of six major tasks: (1) goal setting, (2) environmental analysis, as well as the strategy (3) formulation, (4) evaluation, (5) implementation and (6) control.

According to Hamel and Prahalad (1994), a company's long-term survival is a function of sustaining a competitive advantage that results from a difference in value in comparison to its competitors, as perceived by its customers, with regard to the product or service delivered by the company. Schumpeter (1934) however proposed that any such strategic advantage is temporary in nature, as competitors tend to imitate each other, customer requirements evolve, and technological, industrial and social change occurs.

In order to create and maintain the structures for long-term survival and growth, Tschirky and Bucher (2003) grouped the six major tasks of strategic management, as proposed by Schendel and Hofer (1979), into the "three basic tasks of management" (Tschirky & Bucher, 2003) p .27), namely, design, direct and develop:

- **Design -** Design as a management activity means to create a model of the intended future workings of the business system, i.e., the design model. The aim of design is to create something that does not yet exist.
- **Direct -** Management has to 'direct' or align the company to the design model under the changing conditions of day-to-day operations. Management therefore has to transfer the objectives of the design model to those of the company, which is constantly interacting with the changing external environment.
- **Develop -** 'Develop' as an executive task relates to staying ahead of the competition. Essential to the task is being cognisant of and predicting social, technological and industrial change. In the short term, it relates to functioning better along the company

objectives, removing waste, deficiencies and not repeating mistakes. In the long term, it relates to innovating new products, services and income streams.

4.2.1 Research Sub-Question

Having reviewed the literature above, the dissertation can now answer the sub-research question and achieve the first sub-research objective related to strategic management (see Table 15 below).

Table 15 - SRQ5 and SRO5

CODE	Research Question	CODE	Objective/Solution
SRQ5	What is strategy and what is strategic management?	SRO5	Define and understand the purpose of strategy and strategic management.

In alignment with the three tasks of management (Tschirky & Bucher, 2003), this dissertation formulates the following view: Strategic management has two parallel responsibilities, namely, (1) strategic and (2) operational leadership. Strategic leadership is concerned with designing and developing existing and new success potentials. Operational leadership is concerned with directing the company to meet the demands and success measures in alignment with the success potentials. The success of these parallel responsibilities will result in long-term survival and the achievement of company goals.

Consequently, the framework as the tool for developing successful strategies in order to promote survival and growth has to fulfil the following requirements:

- **R1:** The framework will require the user(s) to define existing and future success potentials.
- **R2:** The framework will require the user(s) to define the criteria to achieve current and future operational excellence.

4.3 Strategy

The purpose of this section is to develop a view of the definition and operationalisation process of strategy.

There is no single definition of the term strategy from the corporate perspective. The term and its understanding differ from person to person, and it has been the subject of numerous theoretical and practical studies (De Wit & Meyer, 2010). Without a clear definition of strategy, the various proponents can however agree that each company faces a dilemma, namely, that there is a gap between the company's competencies and its anticipated future requirements, and that strategy provides a necessary bridge in the form of goals and an action plan (Quinn, 2002). This definition of strategy and the agreement between the various proponents align strategy with the survival and growth of new ventures and SMEs, as strategy also serves as the enabling mechanism ('bridge') between the resource shortcomings of new ventures and SMEs and their required success factors.

The following section will start by reviewing the concept of strategy as having dual components, before examining why strategy can be viewed as both a plan and a pattern. Once both of these topics have been reviewed, the question of 'what is strategy?' can be answered.

4.3.1 Dual Components of Strategy

Chandler (1962), who was viewed as one of the first examiners of the concept of strategy, argued that strategy consists of two components: firstly, a path or plan that sets the direction for the firm, and secondly, a goal or vision of the future. Abell (1999) interprets this to mean that these dual strategies should be run in parallel, as businesses compete for survival in their current market, whilst at the same time needing to prepare for tomorrow. This is similar to Galweiler's (1990) view of having both current and future success potentials.

Abell (1999)p.74) distinguishes between "today-for today strategies" and "today-for tomorrow strategies": the former should detail how the firm is going to maintain a competitive advantage in its present environment, while the latter should encapsulate the

firm's vision of the future and how it will remain relevant. Abell (1999) elaborates on this distinction:

- "Today" strategies require clarity regarding the "definition" of the company – a clear understanding of the company's strategic advantage, target customer segments, business functions and approach to deliver customer value. "Tomorrow" strategies are concerned with how the company should be re-defined in the future to remain competitive.
- "Today" strategies focus on 'shaping-up' to meet customer needs, and on understanding the touch points between the business and the customer, while delivering a unique experience throughout the journey. "Tomorrow" strategies entail 're-shaping' the customer's journey to take into account unknown, new and future customer needs.
- "Today" strategies are concerned with 'compliance' and with how functional units perform their tasks to exploit current market conditions. "Tomorrow" strategies are concerned with 'bold moves' and finding ways to do things differently in the future.
- "Today" strategies entail organising and co-coordinating the business's functional units to develop a competitive advantage. "Tomorrow" strategies encapsulate how functional units could be re-organised to develop future competitive advantages.

The dual components of strategy as discussed above shed light on the important issue that, in order to survive, a company must not only have a competitive advantage in the present, but it must have a future-directed outlook and a vision of how the company will retain its competitive advantage or develop a new one to sustain operations.

4.3.2 Research Sub-Question

Having reviewed the above, this dissertation can partially answer the sub-research question in pursuit of achieving the sub-research objective related to strategic management, as set out in Table 16 below.

Table 16 - SRQ5 and SRO5

CODE	Research Question	CODE	Objective/Solution
SRQ5	What is strategy and what is strategic management?	SRO5	Define and understand the purpose of strategy and strategic management.

Although the review above may seem redundant, as it does not seem to warrant new and separate framework requirements to R1 and R2, it was nonetheless included, as it highlights the customer and his/her as yet unknown needs. The importance of the customer will be revisited throughout this chapter, as strategic frameworks are often criticised for focusing on competition and existing market opportunities only, whilst ignoring the customer's unmet needs and expectations and thus also any possible future opportunities for the firm.

Consequently, the framework will have to fulfil the following requirement:

- **R3:** The framework will require the user(s) to assess and explore the client's current, future and as yet unknown needs.

4.3.3 Strategy Formation

Before the dissertation can formulate an answer or ascribe to a particular position regarding the research question of 'what is strategy?', it must first review the statement that strategy is both a plan and a pattern. This requires a review of the strategy process itself.

The analysis of the strategy process in the literature, whether in theoretical or empirical studies, can be divided into three stages. The first stage is characterised by the debate regarding the best approach to strategy development via either the rational (deliberate) strategy approach or via the emergent strategy approach. The second stage combines the rational (deliberate) and emergent strategy approaches to bring about the concept of strategy formation. The third and most modern stage associated with the topic focuses on the process itself rather than on the approach.

The definitions of strategy as proposed by both Quinn (1980) and Andrews (1987) refer to strategy as a 'plan' and a 'pattern'. This concept was introduced by Mintzberg (1978), who proposed that strategic fit is either a consequence of (1) a deliberate and planned strategy process or (2) a realised strategy that 'emerges' over time via an emergent process (Mintzberg, 1978, p. 945). Scholars initially grouped their views into two schools of thought, namely, that strategy is a function of either a planned or an emergent process, and consequently that strategy should be developed by either a deliberate or an emergent approach.

4.3.3.1 Strategy as a Plan

The rational / classical / planning school of thought is the oldest and yet still very influential approach to strategy development; it utilises management tools, methods and techniques to analyse the company and its competitors to devise a formal plan of future action (Gibb & Scott, 1985). The strategy formation process herein is formal, highly analytical, and explicit and from the top down (from the firm's leaders) with two distinct phases: formulation (planning) and execution. In terms of the rational view, strategy execution is enabled through organisational structure, as resources are allocated according to a master plan to effect growth in desired markets (Chandler, 1962).

The planning school of thought has three defining characteristics (Whittington, 1993). Firstly, it assumes rationality in its reliance on the formulator(s) to predict the future competitive environment and design the correct 'fit' by means of goals, plans and objectives (Mintzberg, et al., 1998). The second characteristic is one of linearity. In this regard, the planning school of thought adopts a hierarchical sequential approach, as senior executives formulate the strategy to be implemented by the lower management levels. Mintzberg and Lampell (1998) describe this as a 'prescriptive' approach, as the planning school of thought is deliberate and emphasises methods and sequences with a focus on planning. The third characteristic is one that defines the planning school of thought as being adaptive: The role of senior executives is to predict future outcomes and steer the company into a position to remain relevant in the new environment (Astley & Van de Ven, 1983).

Within this planned and deliberate approach to strategy, successful strategy development is the result of the rational examination of the company's internal and external environments in order to make calculated decisions on sustaining the firm's competitive advantage (Porter, 1980).

4.3.3.2 Strategy as a Process

Mintzberg's (1978) paper states that realised strategies are not always as carefully planned or under the absolute control of management, as the planning school of thought might suggest. Consequently, each of the three defining characteristics of the planning school of thought (presented above) has been criticised by proponents of the emergent approach.

The first defining characteristic, which relies on strategy practitioners/formulators, has been criticised as being overly optimistic regarding the abilities of these leaders (Morris, 1988), with Huff and Reger (1987) proclaiming that these leaders are often too far removed from the front lines, and Whittington (1993) arguing that the external environment is too difficult to predict. The second characteristic, which proposes the two phases of strategy formulation and implementation, is also criticised, as studies have found that planning and formal strategies are often only developed after the company has already achieved growth (Mintzberg & Waters, 1985). The final characteristic of strategy, as one where the company is trying to find the right 'fit', has been opposed by Hamel and Prahalad (1994), who argue that this view of strategy forces the company to continually catch up with competition rather than being 'creative' and 'inventive' and trying to get ahead of the competition (Hamel & Prahalad, 1994) (Peters & Waterman, 1982).

The bulk of contributions by emergent strategy advocates has been in the study of decision making and strategic change, which discusses the main perspectives of incrementalism, politics, culture and learning (Hamel & Prahalad, 1994) (Hayashi, 2001) (Kraus & Kauranen, 2009). These perspectives propose that strategic decisions face numerous hurdles when being implemented, in contrast to the deliberate school of thought.

The developments mentioned above have led to the formulation of the concept that is now described as 'emergent strategy'. However, there is no real consensus as to its exact definition. Mintzberg and Walters (1985: p257) originally defined it as: "Emergent strategies are realized despite or in absence of intentions". Other authors (Eden & Van der Heijden, 1992); (Mintzberg & Waters, 1985) (Mintzberg, et al., 1998) (Quinn, 1980) suggest that strategy is not realised from the top down but rather created in real time, as functional units make decisions to follow a path of least resistance during their daily activities.

Despite the lack of consensus as to its definition, authors do agree that the emergent approach is characterised as being reactive, adaptive and flexible, and that it is under the influence of individuals who make decisions based on their environment. This is in contrast to the deliberate strategy process, which defines strategy as a finite concept that is set out in advance with the goal of achieving specific outcomes. Advocates of emergent strategy argue that the emergent approach allows organisations to achieve success that would not be feasible through the formulation of deliberate strategies due to deliberate strategies being too rigid (Elshamly, 2013).

4.3.3.3 Strategy Formation

Given the definitions of deliberate and emergent strategy as presented above, it is clear that it would be easily possible to identify examples where it would appear that an organisation's strategy is planned out in advance, as well as instances where a strategy would have emerged over time. In order to address the question which one of these instances is a theoretical match for what happens in practice, Mintzberg (1987) provided the following explanation:

> *"The popular view sees the strategist as a planner or a visionary, someone sitting on a pedestal dictating brilliant strategies for everyone else to implement. While recognising the importance of thinking ahead and especially for the need for creative vision in this pedantic world, I wish to propose an additional view of the strategist – as a pattern recogniser, a learner if you will – who manages a process in which strategies (and visions) can emerge as well as be deliberately conceived. I also wish to redefine the strategist, to extend that someone into the collective*

> *entity made up of the many actors whose interplay speaks an organisation's mind. This strategist finds strategies no less than creates them, often in patterns that form inadvertently in its own behaviour"* (Mintzberg, 1987, p. 73).

In order to explain this concept further, Mintzberg used the metaphor of a potter at work with his clay:

> *"managers are craftsmen and strategy is their clay. Like the potter they sit between the past of corporate capabilities and a future of market opportunities. And if they are truly craftsmen, they bring to their work an equally intimate knowledge of the materials at hand. This is the essence of crafting strategy"* (Mintzberg, 1987, p. 66).

Mintzberg (1978) accordingly proposed that two strategy forming (or strategy making) processes are evident within each company. The initial strategy forming process is deliberate and planned, and encompasses analysing the customer, the company, its position in the market and future growth drivers. The second strategy formation process emerges over time, the result of day-to-day operations, as employees make decisions, "despite, or in the absence of, intentions" (Mintzberg, 1978, p. 945).

According to Mintzberg (1978), strategies can be formed as illustrated in Figure 20 below:

1. Formally planned strategies can be realised – these are referred to as deliberate or intended strategies;
2. Intended strategies are sometimes not realised (unrealised strategies) due to misjudgements regarding the company, the external environment and the future market;
3. Strategies can be realised but were never intended; this may be due to the original planned strategy failing (as in 2 above) or the lack of a strategy from the outset. These are referred to as emergent strategies.

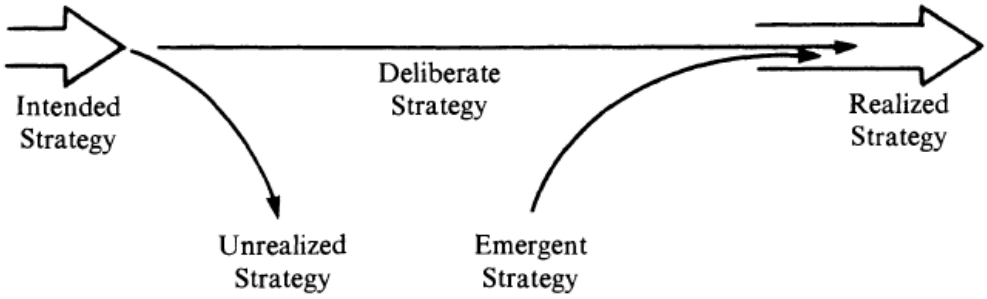


Figure 20 - Strategy Formation Process (Mintzberg, 1978, p. 945)

Therefore, this process reveals a generic formula for the process of strategy development as proposed by Johnson, et al., (2008, p. 401):

(IS + ES) - US = RS

Where:

- IS = Intended Strategy, being an expression of a desired strategy as deliberately formulated or planned by managers;
- ES = Emergent Strategy, being the result of everyday routines, activities and processes in organisations leading to decisions that become the long-term direction of an organisation;
- US = Unrealised Strategy, being the part of the intended strategy that is unrealised or set aside;
- RS = Realised Strategy, being the strategy that is actually followed by an organisation.

Mintzberg and Waters (1985) contend that the fundamental difference between the deliberate and emergent strategy processes is that, whereas the deliberate process focuses on direction and control, the emergent process opens up the idea of learning; in fact, they can be seen as complementary processes (Mintzberg, Ahlstrand and Lampel (1998). Consequently, a number of academics have advocated for the integration of the deliberate and emergent approaches (Hart, 1992) (Johnson, et al., 2003)(Mintzberg & Waters, 1985)(Mintzberg and Waters (1985).

The integration of the two strategy forming approaches and processes has introduced the term ‘strategy formation’ to the vocabulary of strategy management. This can be considered as both the formulation and implementation of strategy according to the rational perspective (Mintzberg, et al., 2003) (Van de Ven, 1992). It has therefore been described as a process in which deliberate and emergent strategy processes converge. Moreover, this definition of strategy formation allows for the distinction between strategy formulation and formation.

This definition of strategy formation also allows for strategy formulation to continue to exist, as it does within the deliberate approach, with the process including the activities of analysing and planning. However, during implementation, strategy formation allows for emergent or unintended strategy to replace unrealised strategy, which is not catered for in the deliberate approach. Should a company follow a purely emergent strategy approach, the strategy formulation phase would be replaced by strategy formation. In other words, strategy formation describes how initial intended plans undergo modification during implementation, and this is why Mintzberg (1994) expressed his preference for the term ‘formation’ rather than ‘formulation’, to describe the nature of the activities.

The above definition of strategy formation describes a process of analysis similar to that of strategy formulation; however, the former places a greater emphasis on analysing the different activities and types of work at the micro-level of the organisation (Johnson, et al., 2003), i.e., the business model as the configuration of resources, routines and capabilities, as these are a function of the emergent strategy coming to the fore. Therefore, companies tend to display both rational and emergent strategy processes, which imply that the best theoretical match for what happens in practice has to be a mixture of both (Elbanna, 2006).

Academics and strategy practitioners thus emphasise the importance of striking a balance between rational, formal strategic planning and supporting emergent strategy processes, as the latter processes are a result of day-to-day problem solving and opportunity recognition (Elshamly, 2013). According to the literature, the most important factor binding the rational and emergent approaches, and one that results in efficient and effective strategy formation, is the concept of ‘involvement’ (Hart, 1992) (Johnson, et al., 2003). This includes the active

management and review of daily activities that support strategy formation (Johnson, et al., 2003) (Elshamly, 2013).

In light of the above, finding a balance in strategy formation between both the deliberate formulation and the emergent components, entails direct alignment with the concept of successful strategic management, as (1) deliberate planning supports strategic leadership, i.e., identifying current and future success potentials, and (2) the emergent strategy process and its emphasis on learning and involvement supports operational leadership, i.e., the knowledge of what works and what does not. Furthermore, it can be argued that planning, which is engrained with the knowledge of daily activities, is critical to the concept of the 'Dual Components of Strategy' and thus to understanding the present evolution and therefore the future of the market and the customer.

4.3.3.4 Strategy Dimensions

The evolution of the understanding of strategy processes within an organisation has been accompanied by a clearer characterisation and contextualisation of the various processes at play. For instance, De Wit and Meyer (2004), p. 5) suggest that there "are three dimensions of strategy that can be recognised in every real-life strategic problem situation", namely: strategy process, strategy content and strategy context. De Wit and Meyer (2004, p. 5), described these dimensions as follows:

> *"It cannot be emphasised enough that strategy process, content and context are not different parts of strategy, but are distinguishable dimensions. Each strategic problem situation is by its nature three-dimensional, possessing process, content and context characteristics, and only the understanding of all three dimensions will give the strategist real depth of comprehension. In particular, it must be acknowledged that the three dimensions interact"*

Strategy process, according to De Wit and Meyer (2004), therefore refers to the process of how a strategy comes into existence within an organisation, and is accompanied by asking the questions of how, who and when:

- How? – How is the strategy analysed, formulated, implemented and evaluated?
- Who? – Who are the individuals involved in the various strategy process activities?
- When? – What is the timeline when the activities within the strategy process take place?

The product of the strategy process is strategy content. According to De Wit and Meyer (2004), strategy content is related to the question word 'what'; in other words, it is what strategy produces; it outlines "what should be the course of action the firm should follow to achieve its purpose" (De Wit & Meyer, 2004), p. 228). According to Montgomery, Wernerfelt and Balakrishnan (1989), strategy content as the output of strategy process determines the approach that the organisation will use to compete within its market. The situation or 'context' within which the strategy process takes place and the content is produced is therefore an important factor. As Elshamly (2013), p. 46) argues:

> *"Strategy context is a significantly different concept compared to the other two dimensions because it dictates the circumstances under which both strategy content and strategy process are determined".*

What Elshamly is referring to can best be understood by referring to De Wit and Meyer (2004, p. 420):

> *"the strategy context is the set of circumstances surrounding strategy making – the conditions under which both the strategy process and the strategy content are formed. It could be said that strategy context is concerned with the where of strategy – where (i.e. in which firm and which environment) the strategy process and strategy content are embedded".*

Therefore, according to Elshamly (2013) the strategy process can only be successfully executed if the context is defined and content is developed. Context is therefore the external and internal backdrop within which each organisation operates, and it is unique in terms of implications for each organisation. The firm's context can be represented at different layers (Figure 21), each of which is constantly evolving; the firms context represents a constant

challenge for the organisation to remain relevant and viable, and therefore should form the backdrop of any strategy development process (Whelan, 2010).

Figure 21 - Layers of the Strategy Context (adapted from De Wit & Meyer, 2004)

Although De Wit and Meyer (2004) include purpose within the strategic layer of context, many contend that purpose requires a separate review, given its influences upon the strategist and therefore the context (Whelan, 2010). The authors who propose a separate review of purpose contend that purpose defines motivation, and that purpose is thus the starting point for strategy development, serving as a constant point that the strategist will refer to, in order to ensure consistency with purpose, or indeed, even to challenge purpose (Whelan, 2010). However, these proponents are aligned with views of De Wit and Meyer's, that context and purpose, like process and content, do not represent parts of strategy, but rather "distinguishable dimensions" (De Wit & Meyer, 2004, p. 5) whose ongoing interplay and overlap bring form and substance to strategy as a concept (Whelan, 2010).

Purpose is represented by the question 'Why?' (or, in other words, 'Why does the organisation exist'?), to which the answer should provide clarity. According to De Wit and Meyer (2004, p. 590),

> *"where managers have a clear understanding of their organisation's purpose, this can provide strong guidance during processes of strategic thinking, strategy formation and strategic change. The organisational purpose can function as a fundamental principle, against which strategic options can be evaluated".*

As such, where context provides the parameters within which the organisation functions, purpose may provide the starting point from which strategic processes and decisions begin. This is not to say that purpose remains static and fixed, but rather that purpose provides the starting point, original scope and direction, and that it may evolve over time, as it comes under pressure, as more information from the various contextual layers comes to the fore.

Different authors have differing opinions as to whether the strategy dimensions should be separated out. Even though the concept of the strategy dimensions is accepted in academia, authors contend that they are artificial, as there is little or no empirical evidence as to their existence in practice. This dissertation ascribes to the viewpoint of De Wit and Meyer (2004) in that context and purpose, like process and content, do not represent separate parts of strategy, but rather "distinguishable dimensions", (De Wit & Meyer, 2004) p. 5), whose interaction and overlap bring substance and form to strategy as a concept.

Therefore, the dissertation accepts that separately acknowledging purpose within context along with the dimensions of content and process allows for greater meaning and clarity regarding the strategy process; aptly described by Mintzberg's (1987) 'Potter' metaphor, which creates the image of a potter sitting on her stool in her studio (context), having received training and long years of experience in the moulding of pots (process), having become experienced in the skill of moulding pots and holding a vision of an end result in the form of a pot (content); finally, the primary motivation for commencing the exercise from the outset is her desire and aim to make a pot (purpose), or indeed, some other vessel made of clay.

4.3.3.5 Strategy as a Practise

As mentioned earlier, previous research has reviewed the difference between the deliberate and the emergent strategy approaches, the output or content of which is the result of either

planned activities or day-to-day decisions. Modern research has focused on the process of strategy by reviewing the engagement of actors and the contextual aspects of strategy. This shift in focus from content to contextual and process strategy dynamics has resulted in a

paradigm shift.

Where (1) the deliberate approach of strategy proposed a sequence of phases undertaken to result in strategy content and (2) the emergent approach proposed interaction between the different phases, the so-called 'processual approach' proposed a mixture of both adding the concepts of experimentation and learning. According to Pettigrew (1992) and Pettigrew et al. (2003), the processual approach came into being in the early 1990s by combining the market based and resourced based strategy perspectives (discussed in Section 4.6.1).

This processual approach was developed based on the concept of "aligning internal resources to external factors as a process of formatting the organization" (Elshamly, 2013) p. 48). The processual approach focused on how this was done, i.e., how day-to-day activities form patterns and become formalised into business practices and processes, rather than the results of such activities, i.e. a competitive advantage.

Initially, the processual approach was considered revolutionary because it viewed strategy in a new way. Naturally the approach came under scrutiny, with leaders in the field criticising its focus on the organisation as a whole rather than on the day-to-day and micro-level activities (Johnson, et al., 2003) (Whittington, 2006). These criticisms led to the birth of the strategy as practice approach (Johnson, et al., 2003) (Whittington, 2006), which is currently the leading viewpoint on how strategy research is conducted (Elshamly, 2013).

The strategy as practice approach focuses on how strategy comes into being within a framework of interaction between people, tools and activities, rather than as a sequential set of processes (Johnson, et al., 2003). The strategy as practice research stream is dedicated to answering the question of 'how' to make successful strategies, taking into account the advantages and shortcomings of deliberate planning as well as the political, social and learning perspectives prevalent in organisations (Szulanski, et al., 2005).

Brown and Duguid (2001) concluded that a combination of the two approaches (deliberate and emergent) could be extremely powerful. They argued that the deliberate actions of prescriptive schools facilitate co-ordination, communication and clarity, whilst the descriptive schools promote a combined effort that fosters creativity, learning and innovation to sustain a future competitive advantage. They thus concluded that the best run firms emphasise continuous progress, favouring neither extreme but managing both.

The strategy as practice viewpoint closely resembles the Process School of strategy, one of eight original schools of strategy proposed by Mintzberg and Waters (1985). Mintzberg & Waters (1985, p. 270) describe process strategy as follows:

> *"The leadership controls the process aspects of strategy (who gets hired and so gets a chance to influence strategy, what structures they work within, etc.), leaving the actual content of strategy to others: strategies are again partly deliberated (concerning process) and partly emergent (concerning content), and deliberately emergent."*

Whittington (2006) stated that managing the process of strategy formation involved strategy practitioners, strategy practices and strategy praxis, as described below:

- Strategy Practitioners – these are the people involved in formal strategy formulation and/or decision making, which may influence how the strategy is executed. They may be external consultants, senior management or staff.
- Strategy Practices – these are all the tools, frameworks, techniques and mental models employed to make decisions or formulate strategies.
- Strategy Praxis – these are the micro-level activities within the strategy process. They include activities conducted during meetings, workshops and interventions.

In an attempt to clarify Mintzberg's (1978) theory of strategy formation, Coda and Mollona (2006) developed a model of strategy formation as a relationship between top-down deliberate planning and bottom-up emergent learning, the result of 4 loops or 'engines' of strategic management. Figure 22 below illustrates the model comprising of the (1) strategic

control loop, (2) the intentional strategy formation loop conceptualising Mintzberg's (1978) strategy as a 'plan' perspective, (3) the internal entrepreneurial initiative loop representing Mintzberg's (1978) strategy as a 'pattern' perspective, and (4) the mental model loop referring to top management or the entrepreneur's beliefs, motivations and aspirations.

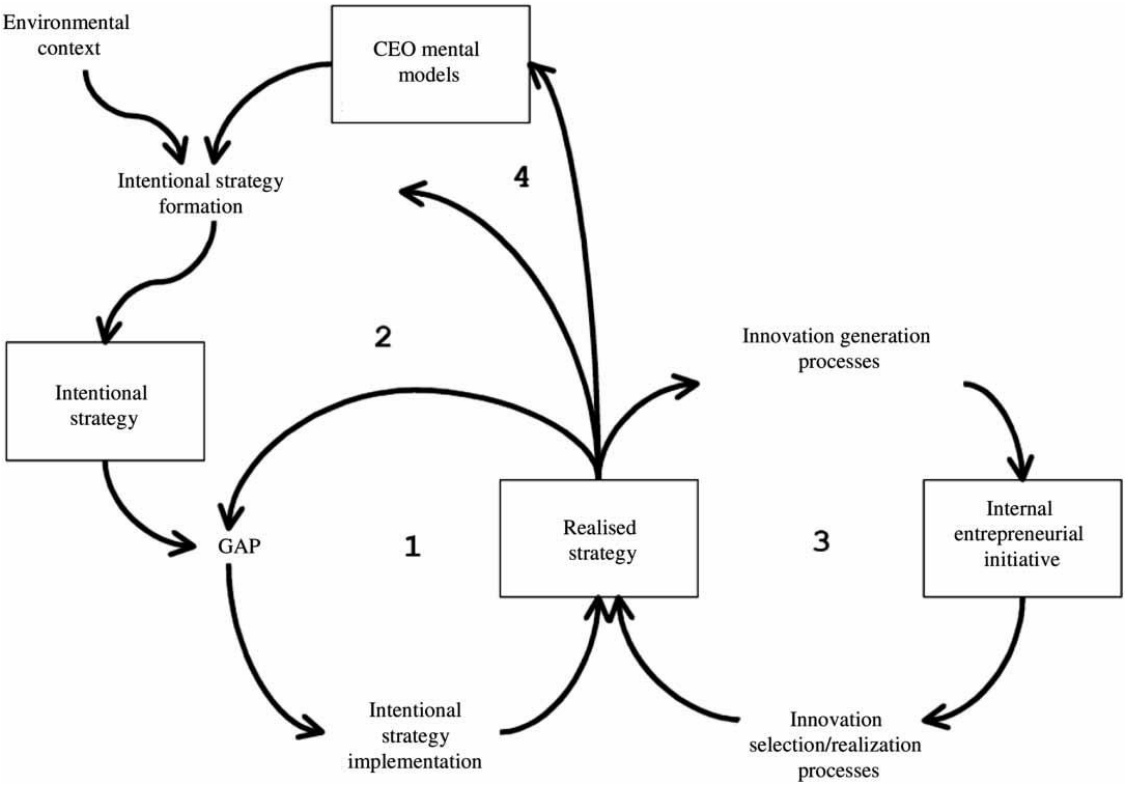


Figure 22 - Strategy Formation Loops (Garengo & Biazzo, 2012) p.83)

According to Coda and Mollona (2006), for a company to be successful, there needs to be balance and co-ordination between the four engines. Focusing on engines 1-2-4 could make the business rigid, inflexible and slow to learn from market feedback and adapt to changing market conditions. An unbalanced focus on engine 3 could result in a chaotic atmosphere and waste, as unrelated initiatives are followed, instead of leveraging company resources or utilising the concept of synergies.

Coda and Mollona (2006) ascribe to a new strategy as practice school of thought, where strategic management and strategy formation lead to a mix between planning and intuitive learning, and a balance between strategic intentions and freedom of experimentation. They

recommend that such strategy formation (formulation, control, experimentation and feedback) needs to be institutionalised as a routine and a core capability or competency.

The strategy as practice approach emphasises the importance of the activities and tools used in the strategy formation process (Whittington, 2006) (Hamel & Prahalad, 1994) (Teece, 1990). Strategy practitioners are seen as 'craftspeople', with the process being both 'analytical' and 'inventive', and with the people involved engaging in activities that allow them to shape the material they work with in a hands-on intuitive manner (to continue the potter metaphor) (Whittington, 2006) (Ackerman, et al., 2005). Brown and Duguid (2001) propose that effective strategy processes and practices lie at the heart of successful strategy making.

4.3.4 Research Sub-Question

Reviewing the section above allows this dissertation to address the relevant sub-research questions and sub-research objectives, as set out in Table 17 below.

Table 17 - SRQ6 and SRO6

CODE	Research Question	CODE	Objective/Solution
SRQ5	What is strategy and what is strategic management?	SRO5	Define and understand the purpose of strategy and strategic management.
SRQ6	How are strategies formed?	SRO6	Understand how strategies are successfully formed.

Reviewing the section above the dissertation is able to formulate the following supposition regarding the term strategy and the elements which impact upon successful strategy formation. Regarding the term 'strategy' the dissertation is aligned with the views of Mintzberg and Quinn (1992), that strategy serves as a bridge to overcome a firm's shortcomings and obtain the necessary success factors to allow the firm to operate in an environment with favourable competitive characteristics. Accordingly the dissertation ascribes to the 5 Ps of strategy, as proposed by Mintzberg and Quinn (1992, p. 12), in that strategy is a:

- Plan: Strategy is a plan, a consciously intended course of action, a guideline (or set of guidelines) to deal with a situation. This definition implies 2 things: (1) strategies are made in advance of the actions they propose, and (2) they are developed consciously and purposefully.
- Ploy: Strategy can also just be a ploy, a precise manoeuvre designed to outwit a competitor.
- Pattern: Strategy is consistency in behaviour or actions to achieve a desired outcome.
- Position: Strategy as a position relates to locating an organisation in its external environment and involves looking outside the organisation.
- Perspective: Strategy as perspective refers to the inside of the organisation and the fact that the strategy is shared among the members of the organisation through intentions or actions.

With regards to strategy formation the dissertation agrees with the views of Coda and Mollona (2006) in that successful strategies are the result of an effective, deliberate and balanced interplay between deliberate formal planning and emergent learning. In order to effect upon this interplay the dissertation ascribes to the strategy as practice paradigm as proposed by Whittington (2006) which requires all stakeholders to recognise that successful strategy formation should be a recognised goal of the firm with the aim of developing successful strategy formation into a core competency. Therefore, the dissertation ascribes to the strategy as practice perspective (Brown & Duguid, 2001) (Whittington, 2006) which proposes that successful strategy formation requires:

  - The right people: strategy formation requires the right mix of people to allow for effective decision making, broad-based support and good understanding of the internal and external issues at play;
  - The right practices: strategy formation utilising the wrong tools to guide the process will result in incomplete, ineffective, misguided or flawed thinking and results;
  - The right praxis: strategy formation should employ the right techniques within the practice to support innovation, sharing, communication and learning;

Additionally the dissertation agrees with Whelan (2010) and De Wit and Meyer (2010) that successful strategy formation requires the stakeholders to consider the 4 elements of strategy, i.e.

- Its purpose: the answer to 'why' the strategy is being formed, which should act as the guide for the practice that may be revisited;
- Its context: successful strategy formation has to consider the internal and external context in order to develop the necessary match between the micro-elements of the firm and the bigger holistic industry picture;
- Its process: as with the potter metaphor, successful strategy formation requires the people (potter(s)) to have knowledge of successful strategy formation from a firm's survival and growth perspective as well a procedural perspective, to support and enable communication, innovation, learning and teamwork and ultimate moulding of the clay (to continue the potter metaphor);
- Its content: successful strategy formation must produce clear and concise content to guide subsequent actions and future strategy formation practices.

Given the above findings, the framework as a tool for developing successful strategies in order to promote survival and growth has to fulfil the following requirements:

- **R4:** The framework will need to illustrate the strategy formation process and allow the user(s) to understand the interplay between formal strategy formulation and emergent strategy realisation.
- **R5:** The framework will require the user(s) to state whether they believe the right people, practices and praxis are present to support successful strategy formulation.
- **R6:** The framework will require the user(s) to explore and state the purpose of the strategy event, which may be reviewed throughout the process.
- **R7:** The framework will require the user(s) to explore the current and future internal (micro elements/business model) and external context to the firm.

- **R8:** The framework will need to present the elements of successful strategy formulation against the backdrop of SME survival and growth perspective.
- **R9:** The framework will require the users to review the strategy content against the backdrop of the 5 Ps of strategy:
    - Plan: Does it provide a course of action?
    - Ploy: Does it take into account and 'negate' the potential actions of competitors?
    - Pattern: Does it outline a consistency in behaviour or actions to achieve a desired outcome?
    - Position: Does it provide information as to the firm's position relative to those of competitors? and
    - Perspective: Does it clearly communicate the firm's understanding of the internal and external contexts that informed the strategy?

4.4 Formal Strategy Formulation in SMEs

The purpose of this section is to review the debate for and against formal strategy formulation in SMEs.

Before it can be ascertained whether SMEs should engage in formal strategy formulation, it is helpful to review the current strategy formation process in SMEs in order to answer whether this process is sufficient and effective and whether the need for the answer to the questions raised in this dissertation exists. Should the answer be that the current process in SMEs is indeed lacking, then the question would be, what are the strategic imperatives of SMEs, i.e. the specific characteristics, which afford SMEs their competitive advantage, and whether or not strategic management may enhance these capabilities rather than impede them (Ates, 2008).

Therefore, before we continue to review the strategy formation process in order to derive the aspects applicable to SMEs, the study needs to formulate a position as to how formal strategy formation can support SME survival and growth.

4.4.1 Strategy Formation in SMEs

A number of authors have studied the strategy formation process in SMEs given that the rapid growth and success of some entrepreneurial SMEs is attributed to their ability and willingness to engage in strategic activities. Karami (2016), p. 36) summarised the findings related to the research field and developed the so-called 'phase theory' that is related to strategy formulation in SMEs:

1. Phase 1: Quasi-Strategy Phase: In the initial quasi-strategy phase, the planning is informal, emergent and intuitive and in the mind of the entrepreneur, communicated verbally with no clear goals to fight for. Consequently, many start-ups and SMEs lose their way due to the uncertain, unstructured nature of this quasi-strategy phase.
2. Phase 2: Defining Episode/Transition Phase: This phase is typically characterised by the failure of ideas and organisation strain, and results in a more cautious outlook and a strong desire to protect the organisation, with people within the organisation realising the importance of strategic direction and thus turning to hard reason and asking why justification for future plans should be sought.
3. Phase 3: Strategy Phase: The final phase is characterised by a deliberate, clearly defined and formal strategy formulation process, as managers develop the awareness to hold formal meetings with employees to review previous performance, internal resources, and the external environment, and to start forecasting the future.

It is evident from the studies and subsequent theory that SMEs turn to formal strategic management during times of trouble. However, some authors suggest that, in many cases, this is an example of too little too late, as firms perhaps do not have the required resource base to survive the turmoil. Consequently, authors suggest that SMEs adopt strategic management from the onset as this can play an important role in accelerating communication and learning along with identifying future problems and barriers and putting in place the necessary mechanisms to address them. This in turn can improve the firm's chances of achieving operational excellence, sustaining a competitive advantage and achieving growth (Cagliano & Blackmon, 2001) (O'Regan & Ghobadian, 2002)(Spillan & Ziemnowicz, 2003).

4.4.2 Strategic Imperatives of SMEs

Before it can be determined whether formal strategy formulation supports new venture and SME survival and growth, the various strategic imperatives that afford SMEs and new ventures their strategic advantage and subsequent long-term existence must be explored. A review of literature revealed the elements discussed below.

4.4.2.1 Flexibility and Responsiveness

Successful strategies among SMEs support risk taking and opportunity creation, which are enabled by the flexible nature of SMEs, and specifically their ability to react quickly to changes in the business environment due to less formal business structures and the ability of employees to adapt their job functions in response to changing internal and external environments (Aloulou & Fayolle, 2005) (Enderwick & Ronayne, 2004) (Margi, et al., 2002).

4.4.2.2 Pursuit of Opportunities

French research during the 1990s first revealed the connection between the active pursuit of opportunities and success amongst SMEs (Messeghem, 2003). Rather than reacting to what others are doing, successful SMEs pursue a strategy of exploration, discovery and exploitation of new opportunities (Wiklund & Shepherd, 2003).

4.4.2.3 Risk Taking

Risk taking as a strategic orientation ranges between the extremes of building on what works (utilising/re-arranging current resources) and venturing into the unknown. According to Rae (2007, p. 25), the action to pursue new opportunities may involve “innovation, decision-making, leading an industry, organising economic resources, contracting, arbitrage (market-maker) and allocating resources”, all of which carry their own risk.

4.4.2.4 Innovation

Success amongst SMEs is connected to their ability to innovate, in other words, to go beyond the current status quo (Rae, 2007). Their strategic orientation towards innovation is related

to intentionally and continually identifying current and future opportunities and devising methods to capture the opportunity in an innovative manner (Aloulou & Fayolle, 2005) (Ghobadian, et al., 2003).

4.4.2.5 Decision Making

Decision making is an important imperative in the strategy process, as it facilitates growth by allowing the company to adapt to current business conditions, allowing it to become more efficient at what the company is doing, and helping them to identify new things to do (McGorvern, 2006) (Spillan & Ziemnowicz, 2003).

4.4.2.6 Resource Allocation

As SMEs have limited resources, successful strategies hinge on identifying the right people and using the right resources effectively and/or overcoming resource deficiencies by innovative means (Kennedy & Keeney, 2006) (Alon, 2004) (Hudson-Smith & Smith, 2007).

4.4.2.7 Operational Focus

Competitive success in SMEs is often the result of technical excellence related to the product or service offering and related production process (Cagliano & Blackmon, 2001). Improvements to the product or production process, however, mainly emerge as a reaction to changing market needs or competition, with success amongst SMEs being a function of their ability to leverage their technical knowhow to adopt new technologies or processes (Jennings & Beaver, 1997).

Any argument in favour of formal strategy formulation should be able to justify how the process enables the various strategic imperatives discussed above by supporting, amongst others, communication, co-ordination, opportunity identification, corporate action, resource efficiency and decision support.

4.4.3 SMEs and Formal Strategic Planning

The question whether SMEs should engage in formal strategy formulation has been a contested topic for some time and has brought two opposing schools to the forefront (Kraus, et al., 2007) (Wiesner & MIllet, 2012).

The planning school of thought discussed earlier (Section 4.3.3.1) proposes that strategic planning within the SME context has the advantages of improving the efficiency with which resources are allocated, and the speed with which information is disseminated and absorbed within the company, thus supporting the strategic imperatives of quick decision making and flexibility (Delmar & Shane, 2003). The planning school recognises that SMEs are faced with many challenges, and thus propose that the development of a strategy could reveal how these challenges could be met, thereby improving the chances for success (Thompson, et al., 2012).

The opposing school argues that strategic processes are more intuitive and creative and that strategies are formed incrementally in small iterative steps, as management navigates the social, political and power dynamics prevalent within companies (Quinn, 1980) (De Wit & Meyer, 2010). Proponents of the emerging school proclaim that formal strategic planning is time consuming and accompanied by red tape and rigidity, in contrast to the SME strategic imperatives of flexibility and swift decisions making (Bhide, 2000) (Vesper, 1993).

Numerous studies (Brinckman, et al., 2010) (Kraus, et al., 2007) have found a positive link between formal strategic planning and SME performance, with the relationship being true for new ventures as well more mature SMEs (Meers & Robertson, 2007).

In spite of the link and advantages associated with formal planning, the evidence suggests that SMEs only engage in the activities on an irregular basis, that they are used by a limited number of individuals within the organisation, and that they are intuitively developed as a reaction to changing conditions (Kraus, et al., 2007). Barnes (2002) in accordance with other noted authors (Cagliano & Blackmon, 2001) (Marsden & Forbes, 2003) (Wiesner & MIllet, 2012) conclude that strategies in SMEs predominantly emerge from the bottom up, and that

they are short-term focused, as managers adapt to market conditions and attempt to exploit opportunities (Gibson & Cassar, 2002) (Yusuf & Saffu, 2005).

This is echoed by the findings of Ates (2008) that formal strategy formulation was not abundant amongst SMEs. Such a lack of formal strategy planning is attributed to an inability and unwillingness to engage in the formal process. The inability stems from the limited resources available to SMEs, including fewer resources, limited access to human, financial and customer capital, and the lack of a well-developed administrative function (Kraus, et al., 2007), or simply due to the need to focus on operational contingencies (Thompson, et al., 2012). Conversely, the unwillingness to engage in formal strategy planning is often influenced by entrepreneurial motivation and competency (Matthews & Scott, 1995). Unless the business owner has a strong belief in his ability to formulate a successful strategy and grow the business, he would not attempt a formal strategy formulation but rather align the firm's goals with a certain objective (Matthews & Scott, 1995).

From an entrepreneur's perspective, three major objections are expressed against the use of strategic processes in SMEs (Kraus, et al., 2007):

- Strategic instruments limit the flexibility and the ability for improvisation;
- Strategic planning is a time-consuming process;
- Strategic management is too bureaucratic.

Such belief in the ineffectiveness of prescribed strategy formulation practices adopted from corporate strategy theory may not be unfounded, with studies concluding that SMEs have unique characteristics (Kraus, et al., 2007) (Kraus & Kauranen, 2009), which may affect the conditions required to work with SME strategies, preventing the direct use of frameworks and tools established for larger companies (Kraus & Kauranen, 2009) (Yusof & Aspinwall, 2000).

A meta-analysis conducted by Brinckmann, et al., (2010), which reviewed the relationship between formal strategy planning and performance, re-confirmed this link in both new and established SMEs, and concluded that companies who pursue a combined and dynamic approach to strategic management by incorporating the elements of planning and learning,

similar to the strategy as 'practice' school, has the greatest effect, as it improves the aspects of sense-making, learning and innovation. Rather than following the sequential approach of planning and then executing, Brinckmann, et al., (2010) stress the need to allocate resources to planning and conducting the activities of planning and doing in parallel.

Evident from this section is that strategic management can support the survival and growth of new and established SMEs (Montgomery, 2008) (Sandberg & Robinson, 2001).Research indicates, however, that current strategic frameworks are biased towards larger companies and are too complex and time consuming for SMEs to adopt (Bellamy, 2009) (Lofving, et al., 2014). To take into account the strategic imperatives and unique obstacles facing SMEs, it is advocated that strategic management in SMEs should be more informal and include several participants, both internal and external (Lofving, et al., 2014). Consequently, it is important to identify the essential characteristics of a strategy formulation framework to facilitate formal planning in SMEs.

4.4.4 Research Sub-Question

Reviewing the section above allows this dissertation to answer the sub-research question and achieve the related objective in Table 18 in support of a formal strategy formulation process to aid new venture and SME survival and growth.

Table 18 - SRQ7 and SRO7

CODE	Research Question	CODE	Objective/Solution
SRQ7	Should SMEs formulate strategies?	SRO7	Define the supporting arguments related to formal strategy formulation in SMEs.

The dissertation finds that the section above, as did Section 4.3.3, emphasises the need to find a balance between the two extremes of the historical planning and emergent schools of thought in support of a successful strategy formation process that will be applicable to new ventures and SMEs.

The section correctly illustrates the benefits of formal planning in support of the strategic imperatives of new ventures and SMEs; however, it also identifies the important criteria associated with a successful process, in that it should eliminate red tape and bureaucracy, not be time-consuming and foster sense making, creativity, improvisation, flexibility and innovation.

In support of these findings the following criteria will need to be met by the resulting framework:

- **R10:** The framework should be easily understood and be executable in a short time period.
- **R11**: The framework should support the strategic imperatives of new ventures and SMEs.
- **R12:** The framework should eliminate bureaucracy and domination by senior personnel and support wider involvement.
- **R13:** The framework should foster sense making, creativity, improvisation, flexibility and innovation.

4.5 Strategy Formulation Characteristics for SMEs

The purpose of this section is to determine the suitable strategy formulation characteristics in SMEs.

Before characterising the ideal strategy formulation aspects, one has to first consider the source of ineffective strategic management among SMEs. O'Regan and Ghobadian (2002) conducted a study to identify effective strategy management principles among SMEs. Their study agreed with the findings of Noble (1999) that ineffective deployment of strategic planning is the main reason for performance not meeting expectations, and that deployment amongst SMEs fails as a result of their inability to overcome barriers.

With regard to the process, O'Regan and Ghobadian (2002) agreed with the work of Beer and Eisentat (2000), that strategy formulation in SMEs should be a formal process, that effective

strategy management is facilitated by actively considering any potential barriers and problems and their likely causes, and that SMEs who engage in formal strategy planning experience fewer barriers to implementation than their informal counterparts. O'Regan and Ghobadian (2002) consequently identified nine strategy deployment barriers, which are similar to those of Beer and Eisentat (2000). These barriers were identified as either originating from internal or external sources.

The internal sources include:

1. Inadequate communication
2. Implementation taking longer than anticipated
3. Shortfall in employee capabilities
4. Overall and individual strategy goals not being well understood
5. Lack of ownership
6. Ineffective co-ordination of implementation

External barriers to deployment include:

7. Daily crises distracting attention from overall strategy
8. Unanticipated external problems
9. External factors affecting implementation

Lofving, et al., (2014) in a review of strategic frameworks that are suitable for the formulation of strategies for manufacturing SMEs, extended their research to include all SMEs, as their paper focused on strategy formulation and not the resulting manufacturing strategy. Their criteria conform to Robinson and Pearce's (1984) criteria for the strategic planning process in SMEs as not being complex, having a time horizon, implementing an informal process and incorporating several participants. The criteria are also aligned with those of Platts (1994) who identified four groups of characteristics of methodologies that have been used successfully in the formulation of strategies: procedure, participation, project management and point of entry. Lofving, et al., (2014) concluded that Platts' (1994) characteristics of participation, project management and point of entry resemble each other, and hence

merged these to form the categories associated with successful strategy formulation, namely, procedure and realisation.

4.5.1 Procedure

Lofving, et al., (2014) defined procedure in accordance with Platts (1994), namely that there should be well-defined procedures and visual tools, and that each step should be documented. According to Platts (1994), the stages to be included in the procedure should be the clearly defined steps of gathering and analysing information, along with the subsequent identification of alternatives and improvements. Lofving, et al., (2014) argued that the frameworks should be easy to use and include well-defined steps to develop competitive priorities and decision categories. Similarly Miltenburg (2005) agrees with Platts, et al., (1998) who advocate the need for SMEs to consider equally the tangible and intangible competitive priorities, when considering both customers and competitors.

The need for visual representation and tools in the decision-making process is also emphasised in the SME context, as it improves communication and understanding, given the participation of numerous participants across different functions in the strategy formulation process (Platts, et al., 1996) (Platts & Tan, 2004). Recent studies highlight that in SMEs knowledge is mainly gained through experience, and that it is often absorbed by means of tacit learning (Macpherson & Holt, 2007). Decisions and data should be documented throughout the process, and be easily accessible to the participants to facilitate communication and improve the speed of the process (Platts, 1994).

4.5.2 Realisation

Realisation of the strategy formulation process is concerned with the organisational issues of participation, communication, project management and point of entry (Platts, 1994), which led to the original grouping within the realisation category (Lofving, et al.,, 2014).

Given the sometimes ineffective use of only top management to devise strategies, according to the traditional ‘planning’ school of thought, Platts (1990) proposes the well-known

mechanism of participation by numerous stakeholders in the strategy formulation process to overcome resistance (Riis, et al., 2006).

Individual and group participation promote enthusiasm and commitment to the process and its outcomes (Platts, 1994). The stakeholders identified to participate in the process should be adequately positioned within the organisation to effect and support the strategic decisions made during the process; this is referred to as adequate resource identification (Platts, 1990).

With regard to the group participation forum, Platts (1994) proposes a workshop style format, where the participants can analyse information, identify problems and develop the necessary strategy to effect improvements. Along with the necessity for clearly defined objectives and expectations of the process and the resulting strategy (Platts, 1990), Platts (1990) and Baines, et al., (2005) advocate the need for an agreed timescale, as this sets the boundary for when the process should end and defines what must be done.

4.5.3 Contextual Issues

Additionally, contextual issues such as internal and external factors also affect the use of a framework (Pettigrew, et al., 1989). As described earlier, clear objectives and expectations were identified as requirements and, in addition to this, Lofving, et al., (2014) identified the importance and expectation of participants wanting to learn something from the process.

4.5.4 Research Sub-Question

Reviewing the section above allows this dissertation to partially address the relevant sub-research question and sub-research objective (see Table 19) associated with identifying the characteristic requirements of a successful strategy formulation framework for new ventures and SMEs.

Table 19 - SRQ8 and SRO8

CODE	Research Question	CODE	Objective/Solution
SRQ8	How are successful strategies formed in SMEs?	SRO8	Define the requirements for successful strategy formulation in SMEs.

Given the above discussed evidence to support formal strategy formulation in new ventures and SMEs, the dissertation agrees with the empirically derived success criteria of a formal strategy formulation process in new ventures and SMEs by Lofving, et al., (2014), as these criteria are aligned with the dissertation requirements (R10 – 13). Lofving, et al.,'s (2014) SME strategy formulation criteria are summarised in Table 20 below.

Table 20 - SME Strategy Formulation Criteria (Lofving, et al., 2013, p. 14)

Procedure	Realisation	Contextual Issues
Simple and easy to understand	Individual participation	Learning process
Use specific steps	Group participation	
Visibility	An agreed timescale	
Tools & techniques	Clear objectives & expectations	
Feedback/Follow-ups	Communication	
Customers/Competition	Involvement	

Therefore, in addition to conforming to requirements R10 – R13:

- **R14**: The resulting framework should ascribe to and support the success criteria as derived by Lofving, et al., (2014).

4.6 Strategy Creation Process

The purpose of this section is to review the strategy creation process and the characteristics suitable for supporting successful strategy formulation in SMEs`.

4.6.1 Strategy Perspectives

As described earlier, at the core of the strategy context dimension is the manager, entrepreneur or senior management, who as 'strategy practitioners' have a significant impact on the strategy process due to their beliefs (Whittington (2006); (Mintzberg & Quinn, 1992).

Following on from this, De Wit and Meyer (2010) propose that competitive advantage requires a firm to make decisions about the type of competitive advantage the firms wishes to have, and the scope of the market within which it wishes to attain it. Therefore, the strategy process is a function of a conscious decision to engage in the strategy formulation process, and is influenced by the mental models of management regarding the best way to formulate a strategy (Brown, 2007). Therefore, we review the dominant perspectives regarding strategy formulation.

The dominant perspectives align themselves to two schools of thought regarding the nature of the market and the firm. The original resource based view (RBV) and the positioning perspectives align themselves with the rent appropriation school of thought, namely that sustainable growth is achieved by appropriating the rent[2] of other firms while at the same time preventing other firms from appropriating your rents, in a world where businesses supply what the market demands (Penrose & Pitelis, 2002). Blue ocean strategy, the dynamic capabilities perspective as an extension of the RBV and the customer-based perspective ascribes to the alternative view of rent creation, i.e., that management has the ability to integrate, expand and exploit knowledge and resources to create new markets and customer value as the best means of sustainable growth and competitive advantage (Penrose & Pitelis, 2002).

Although not business models are not considered a strategic perspective in its own right strategies are operationalised through business models; business model design is thus at the core of the question of, 'how do you achieve a sustainable competitive advantage and generate extraordinary profits?' (Teece, 2010). With business models being concerned with the configuration of resources and activities to deliver value, the question of which activities to own and control however is a function of business model choice and hence strategic choice

[2] Economic rent is any payment to a factor of production in excess of the cost needed to bring that factor into production.

(Teece, 2010). Business models are therefore inextricably linked to competitive advantage and strategy, and it has consequently become a source of confusion among managers and entrepreneurs as to whether they should use business models or strategy (Mansfield & Fourie, 2004, p. 35).

In addition to reviewing the dominant strategic perspectives associated with rent appropriation and rent creation, the following section will evaluate the interplay between strategy and business models in pursuit of achieving the research objective of 'Defining the requirements for successful strategy formulation in SMEs'.

4.6.1.1 Rent Appropriation

Porter is widely considered the father of the first dominant perspective of 'positioning' or the 'Market Based Strategy', by proposing that competitive strategy is the search for a favourable competitive position in an already existing industry (Porter, 1980). Porter advocates a five forces framework to derive a competitive advantage by identifying favourable market positions as well as competitive strategies that are difficult to duplicate, and subsequently configuring the resources and the activities within a value chain to exploit the opportunity (Porter, 1991).

Porter (Porter, 2008) further contends that there are only three fundamental ways in which a company can obtain a competitive advantage, those being: cost leadership, differentiation or niche. Cost leadership derived from economies of scale is often an unfavourable strategy in existing markets, but it has been applied in new markets if the company can acquire the necessary resources. Cost leadership is more likely a function of the invention of a new technology and the ability to protect the technology from current market participants. Differentiation as a strategy sets out to provide a unique selling (value) proposition by establishing itself as unique and different. The risk with this strategy is that imitators may follow, or that the unique value proposition may become obsolete or less important. The final method is one relying on focus on a specific target market that is not considered as significant enough by competitors to follow, and this is named a niche strategy (Karami, 2016).

According to the positioning perspective, specific, generic and valuable positions exist in the market, and companies compete to secure these positions. Consequently, strategy formulation requires these companies to select generic strategies that are based on a process of formalised industry analysis. Therefore, a company's level of competitiveness is in turn a function of their ability to analyse the market or industry, and to position themselves according to the outcome of the analysis (Mintzberg, et al., 1998).

The resource based approach (RBV) disagrees with the positioning perspective with regard to the approach companies take in achieving this goal of establishing and maintaining a differentiating point over time; instead, the RBV proposes that companies should look inward rather than outside themselves for special capabilities, which may act as barriers to competitors wishing to mimic their behaviour, which they would call core competencies (Teece & Pisano, 1994).

Brush, et al., (2001) utilise the so-called 'pyramid of resource-based value creation' to explain and analyse the RBV. This is illustrated in Figure 23 below. At the base of the pyramid are generic resources that are easy to identify and access, provided that the company has the necessary financial capital to acquire or lease them. The interaction and combination of such generic resources offers the company certain capabilities in performing certain activities effectively and efficiently. Capabilities are institutionalised through tacit knowledge and operating routines during the process of combining proprietary knowledge, skill and resources. When capabilities become crucial to the firm's mission, and when they are consistently and purposefully applied, they become core competencies, i.e., "the things the firm does especially well that contribute to the value-creating aspects of a competitive advantage" (Brush, et al., 2001), p. 68). Collections of core competencies, which are increasingly specialised and allow the firm to outperform competitors, become strategic assets. If these strategic assets are rare, imperfectly imitable and cannot be substituted, they are the unique advantage(s) of the organisation.

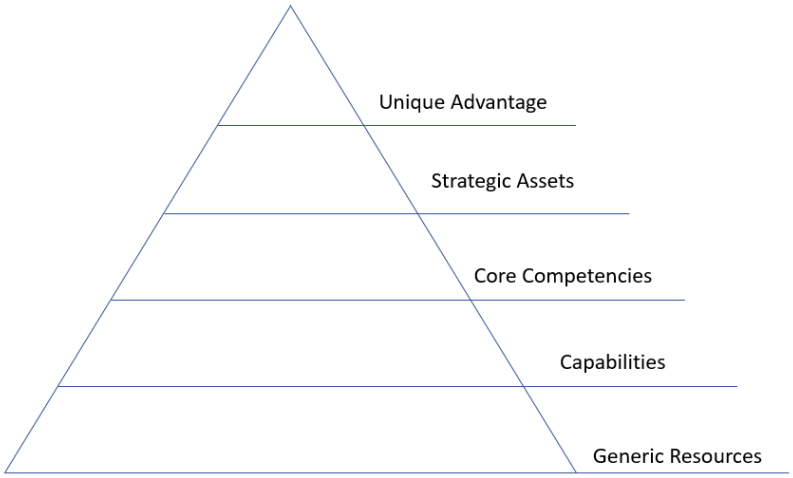


Figure 23 - Resource Pyramid of Value Creation (Brush, et al., 2001) p. 71)

The process of creating and committing to a core competency from basic capabilities requires a company to consider key performances to deliver value, which themselves depend on key industry success factors and on the core customer benefits the company wishes to provide (Rangone, 1999). The commitment to a core competency is not a commitment to a specific product or market opportunity, and does not describe what a company does but rather how it delivers value. If properly formulated, core competencies should remain consistent and consistently add value to a range of product and market categories, thus allowing the firm to identify opportunities and compete in new business areas (Hamel & Prahalad, 1994) (Grant, 1991).

Both the positioning perspective and the RBV adopt a *structuralist* view, where industry boundaries are defined and accepted and the rules of the game are well understood (Kim & Mauborgne, 2004, p. 72). Both these schools follow the process illustrated in Figure 24 below to derive a strategy, with the difference being the emphasis they place on either being market driven (responding to threats and opportunities) or resource driven (responding to strengths and weaknesses). After taking this step, various strategies are designed and evaluated, and the most appropriate one is chosen. This is followed by implementation.

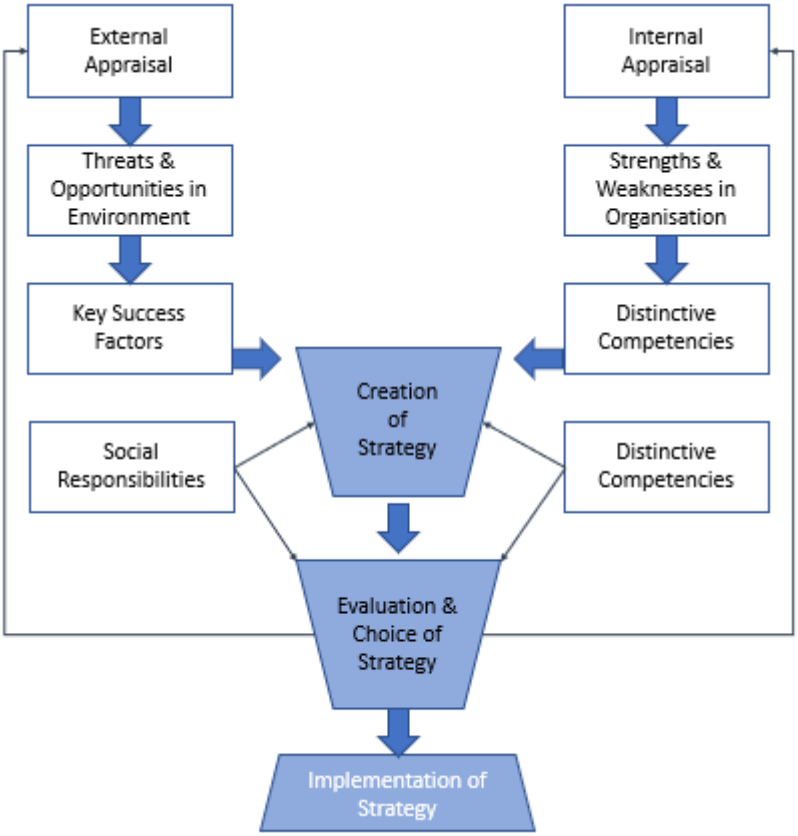


Figure 24 - Basic Design School Process (Mintzberg, et al., 2009, p. 26)

4.6.1.2 Rent Creation

Porter by his own account criticises the positioning perspective for making decisions based on factors that are largely outside the control of an organisation, for the fact that this approach is largely reactive in nature and that competition is occurring at an alarming pace (Porter, 2008). As such and in contrast to the positioning and RBV perspective, the so-called 'blue ocean' and dynamic capabilities perspectives are based on a significant and fundamental paradigm shift that involves creating markets rather than trying to outmanoeuvre competitors in contested market spaces, which are referred to as 'red oceans'.

According to Kim and Mauborgne (2004, p. 72), the business universe consists of two types of spaces, namely: (1) 'red oceans', which represent all the known business industries in existence today and are thus subject to extensive competition, and (2) 'blue oceans', which represent all the industries that are not in existence today and therefore are not subject to competition. Consequently, Kim and Mauborgne (2004, p. 69) propose that "competing in

overcrowded industries is no way to sustain high performance. The real opportunity is to create blue oceans of uncontested market space".

Kim and Mauborgne (2004) argued that companies in red oceans compete with each other head on and in the pursuit of market share; this leads to supply overtaking demand and causing profit margins and growth prospects to decline. They thus advocate redefining industry boundaries as well as the accepted norms within the industry, which they term 'the rules of the game'. Kim and Mauborgne (2004) propose establishing new markets that are untainted by competition and that allow for rapid growth, as demand vastly outweighs supply; the subsequent acquisition of market share would create a suitable barrier to entry for new entrants. Kim and Mauborgne (2004, pp. 72) stated that "although the conceptual understanding of blue and red oceans is relatively new, these two oceans have always coexisted and always will". Therefore, blue ocean strategy does not disprove the positioning perspective but rather advocates looking for what is not there rather than assessing what is there.

According to Kim and Mauborgne (2004, p. 72), companies that have successfully established new markers and industries had a common pattern to their strategic thinking, which they termed "the pattern of strategic thinking blue ocean strategy". Outlined in Table 21 below is the contrast in strategic thinking between these two perspectives (Kim and Mauborgne, 2004, p. 72).

Table 21 - Red Ocean Strategy vs Blue Ocean Strategy

Red Ocean Strategy	Blue Ocean Strategy
Compete in existing markets	Create uncontested market spaces
Beat the competition	Make the competition irrelevant
Exploit existing demand	Create and capture new demand
Make the value and cost trade-off	Break the value and cost trade-off
Align the whole system with its strategic choice of differenentiation ***or*** low cost	Align the whole system with its strategic choice of differenentiation ***and*** low cost

A major underpinning of blue ocean strategy is the concept of value innovation, whereby focus is placed on the customer's core needs, and innovation is required to reduce, combine

or eliminate the factors that industry participants compete on, which would result in greater customer value at a lower cost (Kim & Mauborgne, 2005). This fundamental belief is closely linked to the 'resource knowledge' domain associated with new venture and SME survival and growth, except that, within the blue ocean strategy, the emphasis is on the link between resources and cost rather than execution.

Consequently, the blue ocean strategy rejects the paradigm that a trade-off exists between value and cost (i.e., increasing value is accompanied by an increase in cost), and therefore the blue ocean strategy disagrees with the positioning perspective, in that strategy is essentially a choice between cost and differentiation and that the two are mutually exclusive. The blue ocean strategy supports the notion that value in the form of low cost and differentiation can exist simultaneously (Kim & Mauborgne, 2004, p. 76).

According to Kim and Mauborgne (2004, p. 47-143), six principles underpin the blue ocean strategy, as indicated below in Table 22, and discussed thereafter. Four of these principles are concerned with strategy formulation and two are associated with strategy execution.

Table 22 - The Six Principles of the Blue Ocean Strategy

Formualtion Principles	Execution Principles
1) Reconstruct market boundaries	5) Overcome key organisational hurdles
2) Focus on the big picture	6) Build execution into strategy
3) Reach beyond existing demand	
4) Get the strategic sequence rigth	

- **Reconstruct Market Boundaries:** In addition to value innovation, the second dominant principle of blue ocean strategy is to reconstruct the market boundaries, remembering that in red oceans the market boundaries are well defined and understood. In order to do this, Kim and Mauborgne (2005) suggest looking across the six conventional boundaries of competition: (1) alternative industries, (2) strategic options, (3) buyer groups, (4) complementary product and service offerings, (5) functional-emotional orientation, and (6) time.

- **Focus on the Big Picture:** The second principle in blue ocean strategy is that the strategy formulators' process should focus on the big picture rather than on the numbers associated with goals and initiatives regarding market share and cost cutting, which can lead to analysis paralysis. To do this, Kim and Mauborgne (2005) recommend the use of visual tools, such as a strategy canvas, which creates a conversation and harnesses collective wisdom and different perceptions in a creative top-down and bottom-up fashion.
- **Reach Beyond Existing Demand:** The underlying mantra of the concept of blue ocean strategies is to not fall into the traps of traditional strategies. One such trap is that, as competition increases and businesses pursue more customers, businesses often develop strategies that require customer customisation to cater for finer market segments. Rather than trying to push a variant of their product or service onto new customers, firms should focus on non-customers and their commonalities with their current customers, and develop mechanisms to pull them to their current customer base.
- **Get the Strategic Sequence Right:** Kim and Mauborgne (2005) propose that organisations should follow a specific sequence to evaluate whether the customer offering will result in commercial success. Doing so will allow organisations to test whether their idea will be commercially viable, before investing significant amounts of money and effort into it; following a specific sequence should reduce the risk of failure. This sequence is the following: (1) utility: offering a product with a compelling reason for customers to purchase it, (2) price: the price should attract a mass market, (3) cost: the business should determine whether it has the ability to deliver the offering at the price point established without diminishing profits, and (4) adoption: the organisation will have to find mechanisms to educate employees, partners and prospective customers and remove any obstacles to adoption.
- **Overcome Key Organisational Hurdles:** Effective execution of a strategy is paramount to success and thus the organisation has to overcome a number of hurdles. Kim and Mauborgne (2005) advocate that organisations should apply a tipping point, proposing that fundamental changes can occur quickly if an organisation is able to

leverage the critical mass of employees to move in the desired direction. Once the tipping point has been identified, employees, activities and processes can be leveraged to achieve accelerated execution.

- **Build Execution into the Strategy:** Successful strategy execution hinges on support for the strategic intent. Kim and Mauborgne (2005) consequently recommend that a culture of trust and commitment must be created to ensure that the agreed-upon strategy is implemented. Poor processes are at fault, if strategies are not being implemented, as employees lose faith in strategies due to their poor execution. Therefore, Kim and Mauborgne propose that robust processes be devised in consultation with the key stakeholders in order to promote execution and retain momentum.

In light of the previous chapter, it can be seen that the strategic principles advocated by Kim and Mauborgne adhere to and enforce the concepts that support SME and new venture survival and growth. While some of the principles are synonymous with the other dominant strategic perspectives, the blue ocean perspective deviates from the other perspectives in its explicit alignment with the concept of liability of newness: it focuses on the need for market adoption, reducing or negating the number of success factors required to deliver the product or service, and addressing management risk by building execution into the strategy.

Where Kim and Mauborgne's theory can be seen to address the shortcomings of the positioning perspective in allowing for rent creation, so too the dynamic capabilities (DC) perspective can be viewed as an extension of the resource-based view. Dynamic capabilities as a concept were originally proposed by Teece, Pisano and Shuen (1997) as a response to the lack of the RBV's ability to refresh and create future valuable competencies in dynamic and changing environments.

Dynamic capability is described by Teece, et al., (1997) as a strategic management process, as opposed to an operational capability, which proposes that a competitive advantage can be created and maintained through "the capacity of an organization to purposefully create, extend, or modify its resource base" (Helfat, et al., 2007, p. 31). The logic of the dynamic capabilities perspective is that, under the positioning and RBV perspectives, a company is

under threat of new entrants or imitation by competitors; however should the company be able to alter its resource base and serve new or unmet market needs in the short term, then this will lead to competitive advantage in the long term. As is the case with the blue ocean strategy, the idea is to be where the competition is not, and that, once the competition has caught up, the company has already moved on from the previous competitive position.

In order to qualify as a capability in the RBV sense, the ability to create and refresh resources and competencies, the dynamic capabilities must be patterned and be applied purposefully rather than being the result of luck or an innate talent (Rangone, 1999). Ambrosini and Bowman (2009) thus assert that the value creation process of DC begins with (1) searching or learning, which leads to (2) the creation and choice of capabilities and competencies, which in turn affect the resource base (Ambrosini & Bowman, 2009). DC is linked to competitive advantage in creating new core competencies, which are difficult to imitate, as customers demand change (Brown, 2007).

In a rapidly changing business environment, with greater access to resources and diminishing barriers to entry, it is becoming increasingly difficult for businesses to become established and to maintain a differentiation point based on product features and benefits alone (Brown, 2007). Moreover, given the increasing access to information a new addition to business strategies is the customer based paradigm.

Whereas both the position and RBV perspectives implicitly imply or explicitly state that they are focused on the customer, the positioning perspective is predominantly concerned with whether the market is attractive, while the RBV perspective revolves around identifying whether the company has the unique competencies to deliver value to the customer (Kaplan & Norton, 2004). The customer based perspective makes the customer and their underlying needs the focus of attention, and it is concerned with inventing new ways of serving their needs (Brown, 2007) (Kaplan & Norton, 2004).

The customer based perspective is operationalised through innovation theory, while understanding is derived from customer empathy and immersion in the problem space in the hope of identifying an unmet need (Kaplan & Norton, 2004). Viewed alternatively, the

customer based perspective can be viewed as an extension of the dynamic capabilities perspective, in which the company's strategic advantage is derived from the ability to assess future customer needs and their ability to effectively combine and re-organise the firm's resource base to deliver value to the customer to meet this new need.

4.6.1.3 Business Models

As discussed earlier business models are inextricably linked to strategy as strategies are operationalised through business models and the choice of which resources to develop and own impact upon the firms competitive advantage. Accordingly the following section will review the definition of a business model, its relationship with strategy and its development process.

4.6.1.3.1 DEFINITION

Various scholars propose that the concept of the business model has become popular due to the advent of the internet and greater access to information, as well as due to globalisation, access to alternative supply chains, technological advancement, and companies offering their product or service for free and rapid growth in emerging markets (Casadesus-Masanell & Ricart, 2011) (Zott, et al., 2011). As a consequence, businesses have had to reassess how they address customer needs, create and deliver customer value and ultimately capture revenues. However, despite the popularity of the topic, great disparity still exists surrounding the definition of a business model and its elements (Zott, et al., 2011).

Even though broad conceptual ideas can be formulated as to what a business model is, no singular definition has been accepted within the academic community. In a seminal study conducted by Zott, et al., (2011) seeking to answer this question, "what is a business model", they found that business models include: a statement, a description, a representation, an architecture, a conceptual tool or model, a structural template, a method, a framework, a pattern and a set of resources.

Based on the various definitions, Zott, et al., (2011) identified the following common understandings of:

(1) What a business model entails:

i. Business models encompass the firm's economic interactions with external parties, the importance and details of the value created for various stakeholders, and the activities and resources required to deliver value to said stakeholders;

ii. Business models simultaneously attempt to encapsulate on a holistic system level perspective what a firm does (content) and how a firm does it (process); and

(2) What a business model does not entail:

iii. Business models are not similar to a supply chain in describing a linear set of activities in the process of value creation form suppliers to customers. Business models are more complex, interconnected and abstract in the manner in which they encompass the exchange and relationship between multiple parties and activities.

iv. A business model is not the same as a product market strategy or a corporate strategy, although both of these elements can be encapsulated in a business model.

In addition to trying to define a business model, a number of authors have attempted to delineate the various components of business models and to represent business models via a combination and mixture of textual, verbal and ad-hoc graphical representations, as well as schematics with different classes of elements including participants, relationships explaining the flow of money, information, products or services, and through ontologies.

Weill and Vitale (2001) introduced a set of simple schematics in an attempt to provide a set of tools to analyse and design businesses. Their schematics differentiated between three classes of objects: (1) interested participants, which include customers, suppliers and partners, (2) relationships, and (3) flows, which included those of money, information and products/services. Similarly, Tapscott, et al., (2000) proposed the use of a value map to depict the web within which a business operates and included the various participants (customers, suppliers, partners) and the interaction between them, i.e., flow of money, information and/or tangible and intangible benefits.

Other authors have attempted to define business model ontologies. These authors propose that a business model ontology comprises the conceptualisations and formalisations of the elements, relationships, vocabulary, and semantics of an entity (Osterwalder, et al., 2005),

which are broken down into several levels of decomposition with increased depth and complexity (Zott, et al., 2011). According to Osterwalder (2004), a business model on a high level consists of four main elements, namely: an offering element, a customer element, an infrastructure element and a finance element. These four elements can be further sub-divided into 9 smaller sub-element, said to represent the nine building blocks of a business model, and these are illustrated in Figure 25 below.

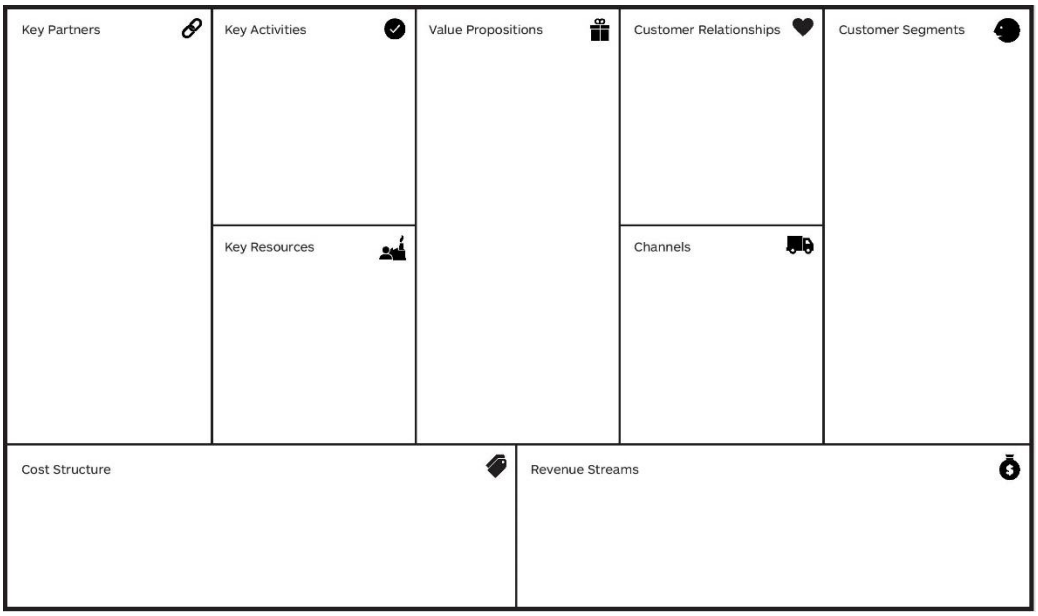


Figure 25 - Business Model Canvas (Osterwalder & Pigneur, 2009, pp. 18, 19)

In the absence of a unanimous definition of a business model and according to the definitions and arguments presented above, this study adopts the following understanding of a business model, echoing the sentiments of Ungerer (2016), that any attempt to define the concept will diverge from the beliefs of some authors, and that such an attempt is futile from the onset, as an all-encompassing definition cannot be formulated. Nonetheless, this dissertation adheres to the supposition that

> *"a business model is understood as a conceptual abstraction that consists of various elements and relationships; and expresses the core logic of how a business intends to create, deliver and capture value" (Ungerer, 2016, p. 28).*

4.6.1.3.2 BUSINESS MODELS AS STRATEGIC PERSPECTIVES

A recurring debate and source of confusion among inexperienced managers and entrepreneurs is whether they should use a business model or a strategy (Mansfield & Fourie, 2004). The terms business model and strategy have been used interchangeably and do indeed share many similarities, however they are different.

Business models are concerned with how a company creates and delivers value to customers and its methods for capturing revenues and profits (Osterwalder, et al., 2005), i.e., it has a procedural focus. The business model however is independent of competitors and the current and future state of the market, and this is where strategy comes in (Teece, 2010). Business strategy describes the customer segments that will be targeted, how the company will engage with competitors through either a capabilities or a positioning perspective, and how the company will respond to the market environment from a dynamic capabilities and emerging strategy perspective.

Strategists are resolute in their belief in the distinction between strategy and business models, viewing strategy as being superior. This is due to the main difference between the two concepts in that business models do not take into account competition, the concept of positioning and creating and sustaining a competitive advantage, whereas strategy does (Magretta, 2002) (Mansfield & Fourie, 2004) (Zott, et al., 2011). According to strategists, business models are pre-occupied with the customer and focus on value creation, co-operation and partnerships (Mansfield & Fourie, 2004) (Zott, et al., 2011) to strategists this focus is gravely erroneous as it suggests that business models can exist devoid of a competitive advantage. Other concepts viewed as critical by strategists that are not recognised or readily identifiable with business models, are those of strategic intent, goal and objective setting and environmental analysis (Mansfield & Fourie, 2004).

Additionally, many strategists refer to the failure of business models, with the concept of business models being popularised by the advent of the internet and many businesses rising to fame overnight, only to be revealed as spectacular failures later on. According to Porter (2001), and with specific reference to internet businesses, these failures were a direct result

of the vocabulary used to describe their strategies. According to Porter (2001, p. 13), "The misguided approach to competition that characterises business on the Internet has even been embedded in the language used to discuss it". He thus strongly opposes describing businesses in terms of business models and advocates thinking in terms of and describing businesses with regard to strategy and competitive advantage.

Porter's (2001) criticism of business models hinges on three core arguments:

1. Firstly, he disagrees with how business models describe companies, in that they focus on how they do business and generate revenue. According to Porter, this focus is ill advised, as merely conducting activities and capturing revenue does not automatically result in the generation of a profit.
2. Secondly, business models do not explicitly consider competition and positioning, which he likens to building a house on sand; no business can be successful if it is evaluated independently of its industry.
3. Thirdly, Porter dislikes the descriptive terms of e-business and e-strategy because in his view this encourages managers to think of their internet based operations as independent entities from the firm. However, failing to integrate these operations into the proven business and existing strategies of the firm can also ultimately lead to an inability to harness their existing competitive advantage.

Reviewing Porter's sentiments, it can however be argued that strategy and business models are not mutually exclusive. According to Linder and Cantrell (2001, p. 13),

> *"Just because some people went overboard with ill-considered investments based on flimsy valuation methods in the recent past does not mean that we should throw business model thinking away".*

Linder (2001) argued that, if the shortcomings of business models can be addressed from the onset, i.e., that the main goal is to make a profit, then it is important to consider the industry and competitors and to embed internet activities into the business; in this way, business

model thinking can be considered as a structured complementary approach to strategy creation.

As a result, the debate between either choosing business models or strategy becomes moot. Authors argue that, if strategy can be formulated independently of a business model mindset, then surely it should be able to translate said strategy into a viable business model (Teece, 2010) (Zott, et al., 2011) (Mansfield & Fourie, 2004). The corollary should also be true: in other words, if a successful business model is analysed, then one should be able to deduce a strategy based on the consistencies between the various elements contained within it. Therefore, business models and strategy are fundamentally linked and the process of deriving a business model or strategy is bi-directionally linked (Casadesus-Masanell & Ricart, 2010), as illustrated in Figure 26 . Accordingly, business models can serve as an integral connection between the rational (deliberate) and emergent strategy approaches, and they can facilitate strategy formation.

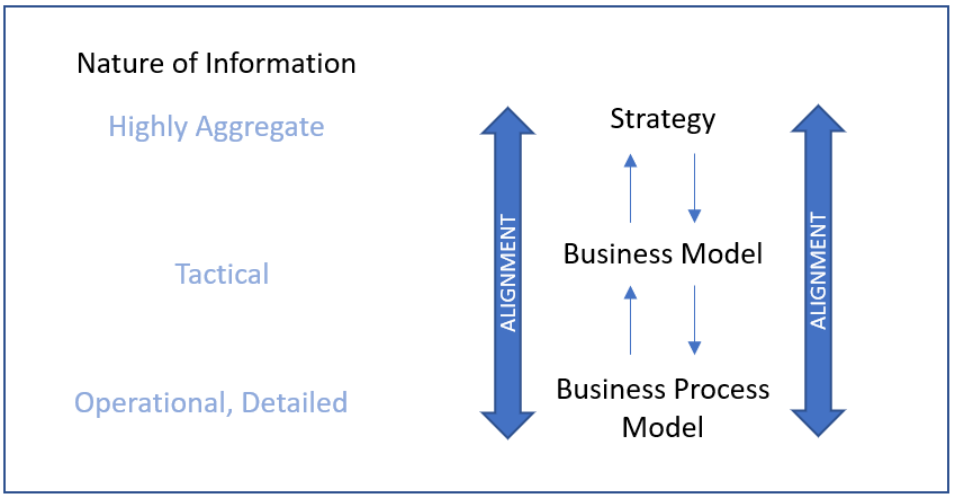


Figure 26 - Business Model Connecting the Deliberate & Emergent Strategy Perspectives

Therefore, some authors propose that the debate should be set aside, as neither concept replaces the other and thus both should be used and can effectively co-exist (Mansfield & Fourie, 2004). According to Zott and Amit (Zott & Amit, 2008, p. 1), “Business model design and product market strategy are complements, not substitutes”. Similarly, Richardson (2008) argues that business models explain how the activities of the firm interconnect to execute its

strategy, and therefore businesses models serve as the bridge between strategy formulation and execution.

Osterwalder (2004) added that business models and strategy address similar issues; however, that they exist on different business layers. Osterwalder (2004, p. 17) stated that:

> *"I understand the business model as the strategy's implementation into a conceptual blueprint of the company's money earning logic. In other words, the vision of the company and its strategy are translated into value propositions, customer relations and value networks".*

This dissertation ascribes to the sentiments of the aforementioned authors (Mansfield and Fourie, 2004) (Osterwalder, 2004) (Zott and Amit, 2008) who propose that strategy and business models can and should co-exist, that they address each other's shortcomings and that they can effectively complement each other to result in value greater than the sum of the parts.

This view is echoed by Ungerer (2016, p. 40)

> *"It can therefore be said that a business models is the corporeal form of (some aspects of) strategy. The point about business models not focusing on competitive advantage is still valid, but there is no reason why it is not possible to use the business model approach due to its superior, less ambiguous and more communicate-able structure, and infuse it with a competitive advantage creation mind-set to enable the creation of competitive strategies."*

4.6.1.3.3 DEVELOPMENT PROCESS

As argued in the previous section, business models differ from strategy in that they focus on the concept of delivering and capturing value. Therefore, the process of how to develop a business model also differs from that of formulating strategies. However, to date, the concept of a business model has not been unanimously agreed upon, and moreover the process of developing business models is still not finalised.

The first, and most popular, model suggested for developing business models is that of Teece (2010, p. 180), who stated that:

> *"Coupling competitive strategy analysis to business model design requires segmenting the market, creating a value proposition for each segment, setting up the apparatus to deliver that value, and then figuring out various 'isolating mechanisms' that can be used to prevent the business model/strategy from being undermined through imitation by competitors or disintermediation by customers."*

Teece's (2010) model is shown in Figure 27 below.

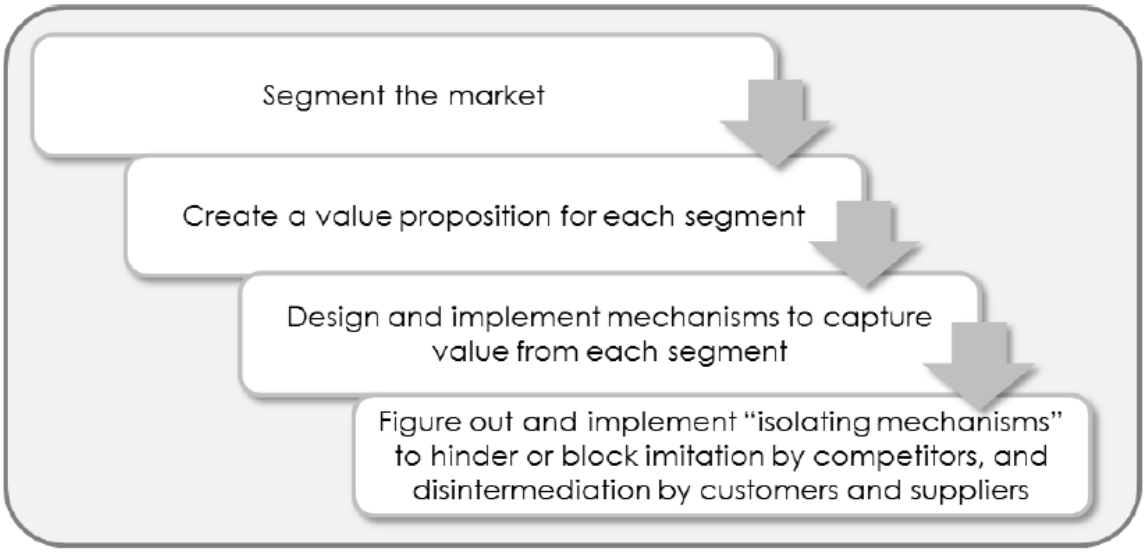


Figure 27 - Steps to Achieve Sustainable Business Models (Teece, 2010, p. 182

Whether the strategy is to meet a current market need or create a new market, sustained benefit is derived if the firm is able to prevent the business strategy from being undermined by imitation by competitors or disintermediation by customers through various isolating mechanisms (Dierickx & Cool, 1989)(Mazzarol & Reboud, 2011) (Teece, 2010). These isolating mechanisms include:

- Rare and inimitable resources as defined earlier
- Loyalty from customers or suppliers
- First mover advantages related to economies of scale and customer awareness

- Asset mass efficiencies or economies of scale and scope
- Asset stock efficiencies due to synergies
- Asset erosion or reinvestment to maintain an asset currency
- Causal ambiguity, which makes for uncertain imitability

Similarly, a more modern model called the Business Model Navigator developed at the University of St Gallen (Gassman, et al., 2014) proposed a business model development process based on reconfiguring 55 base models identified and answering the four associated questions: (1) who is the target customer, (2) what is the value proposition for the customer, (3) how is the value chain behind the value proposition created, and (4) how is value captured.

The methodology is aligned with the four high level elements of business models, as described by Osterwalder (2005) and accordingly the 9 sub-elements can be derived if the method is superimposed over the business model canvas, as depicted below in Figure 28.

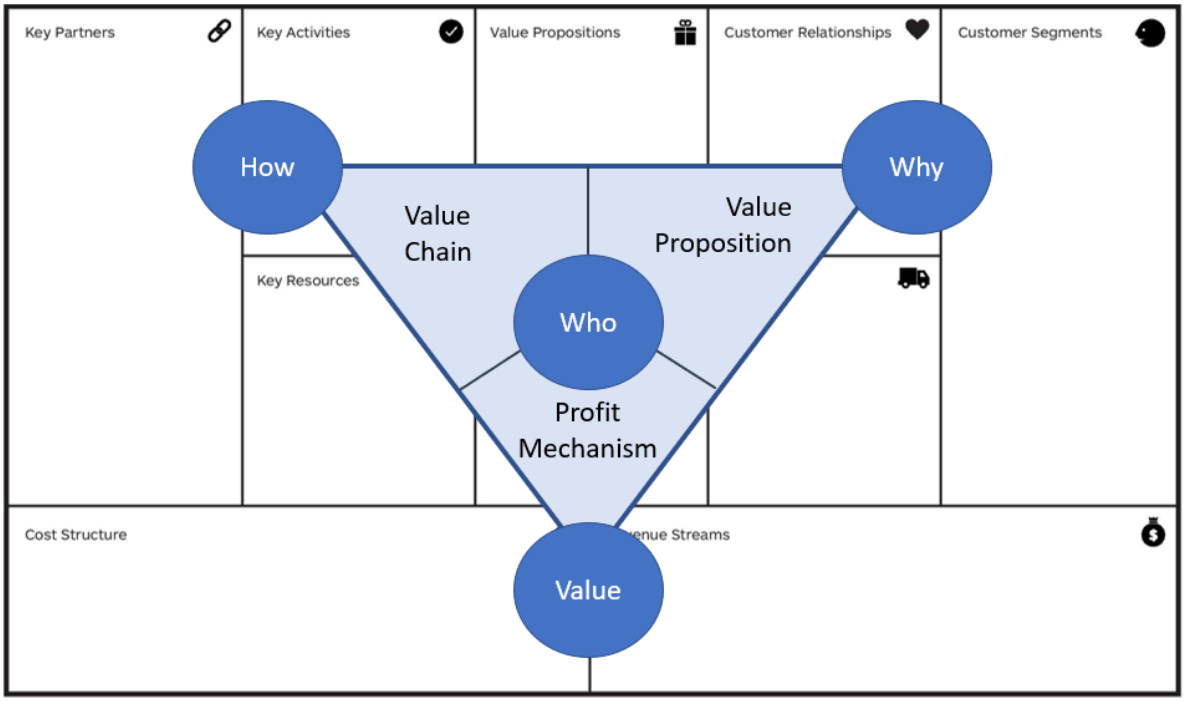


Figure 28 - Business Model Navigator & Business Model Canvas Comparison

As with Teece's model (2010), the business model navigator process reviews competition after the fact: "Once the four dimensions fit internally, you will have secured a competitive

advantage for your company that cannot be easily imitated by your competitors" (Gassman, et al., 2014) p. 54). The authors of the methodology even refer to Porter to advocate this point "In the words of strategy champion Michael Porter (1996, p24):

> *"it is harder for a rival to match an array of interlocked activities than it is to merely to imitate a particular sales-force approach, match a process technology, or replicate a set of product features."*

With no single development process, the processes discussed above seem to be aligned in their tasks of (1) identifying a value proposition suitable for a particular customer segment, (2) assessing the resources to establish a value chain to deliver value to the customer and (3) developing ways to capture profit from the customers. The processes assume that the unique combination of value to the customer segment, value chain and profit mechanism would isolate the business from competition.

4.6.1.4 Research Sub-Question

Reviewing the section above allows this dissertation to partially address the relevant sub-research questions and sub-research objectives associated with identifying the characteristic requirements of a successful strategy formulation framework for new ventures and SMEs, See Table 23 below.

Table 23 - SRQ8 and SRO8

CODE	Research Question	CODE	Objective/Solution
SRQ8	How are successful strategies formed in SMEs?	SRO8	Define the requirements for successful strategy formulation in SMEs.

Reviewing the various strategy perspectives, it is evident that the business model development process can be viewed as complementary to both the positioning and resource-based perspective in so far as its communicable structure could aid in developing or identifying an unmet market need, with favourable strategic characteristics, as well as in

understanding the micro-elements of partners, resources, capabilities and competencies required to deliver and capture value.

Should one further infuse the process with the knowledge of blue ocean strategy, dynamic capabilities and the customer based perspective, suitable outcomes to the requirements of these respective fields should help firms develop a business, which does not compete with existing market participants, or that has a suitable isolating mechanism, and to enable it to utilise its resource base to develop new markets and service future customer needs.

The principles of the various strategic perspectives are aligned with the knowledge domains associated with the survival and growth of SMEs and new ventures as well as with the requirements identified within this chapter, which support successful strategy formulation. Therefore, the resulting framework will have to adhere to the following requirements:

- **R15:** In accordance with the positioning perspective, the framework will require the user(s) to identify an unmet fundamental customer need, rather than inferring their needs from current offerings or providing minor differentiation points, with favourable strategic characteristics now or pursuant to the implementation of isolating mechanisms.
- **R16:** In accordance with the resource based and dynamic capabilities perspective, the framework will require the user(s) to fundamentally assess and reduce or negate the need for partners, resources, capabilities and competencies required to deliver value to the customer rather than inferring these value chain requirements from current industry infrastructure.
- **R17:** The framework will have to support the 6 principles of blue ocean strategy.
- **R18:** The framework will require the user(s)s to map the micro elements of the business model in light of the intended strategy and competitors on a suitable, easily communicable canvas.

4.6.2 Strategy Process

Just as there is no single definition of strategy, there is no single process of creating them. According to Mintzberg and Waters (1995), formulating a corporate strategy entails two phases, strategy formulation and strategy implementation. Mintzberg and Waters (1985) argue that the principal sub-activities of strategy formulation include identifying opportunities and threats in the company's environment, assessing the company's resources in terms of their strengths and weaknesses, reviewing the personal values of senior management, and acknowledging the company's non-economic responsibility to society. Similarly, Mintzberg and Waters (1985) assert that the main sub-elements of strategy implementation include organisational structure, organisational processes and top leadership.

Many authors, however, propose their own sequence of events within the strategic management process, proclaiming that the process entails the essential activities of "situation analysis, strategy formulation, strategy implementation, and strategy evaluation" (Coulter, 2005, p. 5)

Ates (2008) conducted a review of the various activities proposed within the strategy process and concluded that they can be distilled and categorised within the broad definitions of strategy formulation, implementation and review and control.

Ates (2008, p. 40) defines each phase as the following:

- The strategy formulation phase conceives of analysing the environment; analysing core competences and capabilities; evaluating opportunities; defining grand strategy and goals; and finally defining short-term objectives and action plans.
- The strategy implementation phase deals with executing strategy; resource allocation through planning and budgeting and workforce alignment; institutionalising strategy regarding communicating; and embedding strategy and managing strategic change.

- The review and control phase is concerned with gathering feedback from strategic actions; revising strategy and appraising; testing and reconciling strategy with plans/needs; and modifying goals if required.

This categorisation does not aim to be prescriptive but merely to describe the various elements within the process. According to Mintzberg and Quinn's (1992, p. 236) view of the relevance of frameworks and categories:

> *"we all need frameworks and categories in which to store the confusing set of experiences that the world throws at us. That is what theory is. Without it, we would simply be overwhelmed and paralyzed".*

Ates' (2008) goal is not to diminish the importance of the various activities proposed by the respective authors, but to build a framework and describe the process at hand. Like Mintzberg and Quinn (1992), Ates too does not ascribe to the planning school of thought, recognising that the three phases are not separate but rather continuous and interdependent.

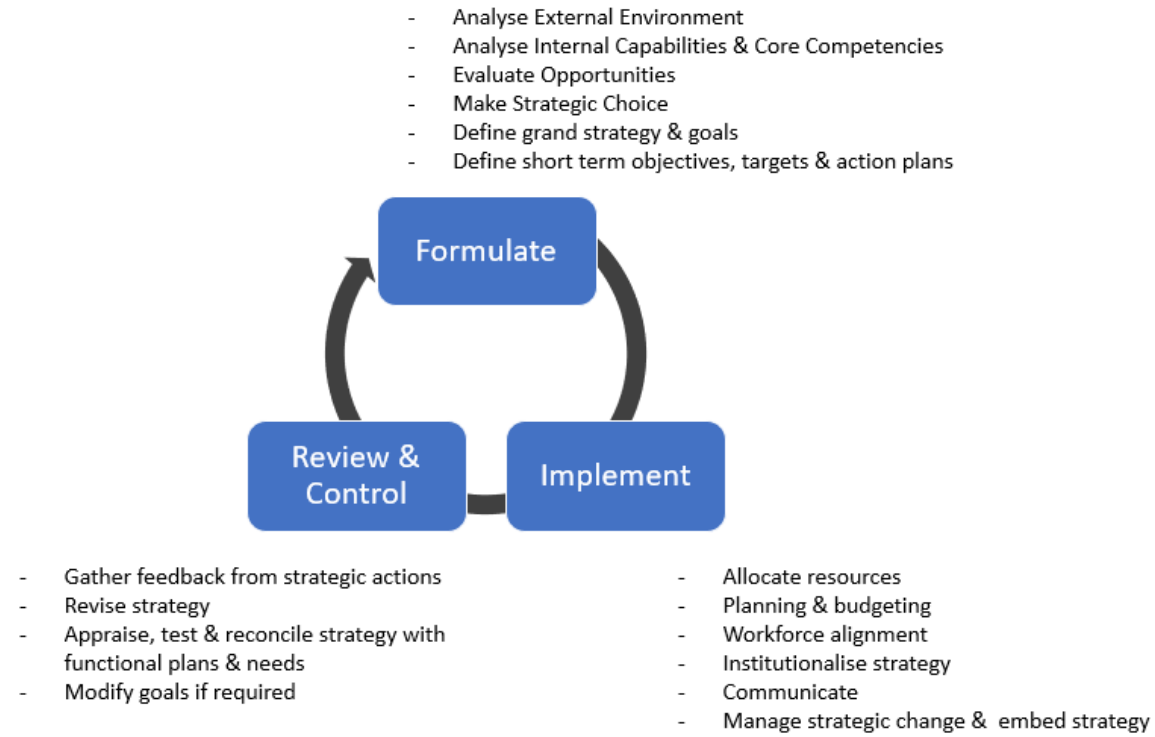


Figure 29 - Strategy Process Framework based on Theory (Ates, 2008, p. 44)

Even though the strategy management process is more informal and intuitive in SMEs, Ates (2008) reconfirmed the view of several authors (De Jong & Marsili, 2006) (O'Regan & Sims, 2005) (O'Regan & Ghobadian, 2007) (Tennant & Tanoren, 2005) that elements of the strategic management process as presented in Figure 29 are evident in SMEs.

Although Mintzberg and Quinn (1992, p. 240) stated that "strategic vision is often in the head of the individual", they also acknowledged that SME managers engage in strategic tasks beyond those of an operational and tactical nature. This led to research trying to gauge the relationship between strategy processes and performance in SMEs. For instance, Duchesneau and Gartner (1990) found that strategic planning was a top priority amongst top performing SMEs. De Jong and Marsili (2006) concluded that, even though many firms did not have formal business plans, they did engage in elements of the strategic process, such as engaging with customers, suppliers and employees to identify changing market conditions and adapt accordingly.

The following section will review strategy process elements as proposed by Ates (2008). Although the scope of this dissertation excludes strategy implementation as well as review and control, the following section will review these elements as the field of blue ocean strategy revealed the importance of formulating strategies with implementation in mind as well as the review and control being a crucial element of finding a balance between the deliberate and emerging strategy processes.

4.6.2.1 Strategy Formulation

The following section will review the applicability of the mainstream theoretical strategy formulation process elements on SMEs.

4.6.2.1.1 AWARENESS

Environmental analysis, both internal and external, is recognised as critical to successful strategic planning (Beal, 2000) (Côté, et al., 2005), with research suggesting that there is a significant relationship between increasing environmental scanning, degree of strategic fit and increasing organisational performance (Aloulou & Fayolle, 2005).

According to Karami (2016) the purpose of environmental analysis is to identify strategic factors, which can result in a competitive advantage and affect the future of the firm. These factors include external elements (opportunities and threats) as well as internal elements (strengths and weaknesses). Consequently, many recommend a SWOT analysis, which is an acronym for defining the strengths, weaknesses, opportunities and threats of a specific firm (Karami, 2016) (Elshamly, 2013).

The SWOT analysis proposes that the firm review and understand the external societal and task forces affecting the business (Elshamly, 2013). Researchers advise reviewing the key societal factors, which are political, economic, social and technological, together abbreviated as PEST (Karami, 2016). Some researchers have also included another factor, namely, environmental (PESTE-E), thus emphasising the growing importance of reviewing future trends associated with the biological environment (Karami, 2016). However, these factors are general in nature and unlikely to influence the immediate activities of the firm.

In addition, the firm also has to review its internal environment and associated variables. According to the researchers (Beal, 2000) (Côté, et al., 2005)(Aloulou & Fayolle, 2005), an in-depth internal analysis includes investigating the firm's internal resources (which may or may not be under the direct control of the firm), and its capabilities and core competencies. The internal analysis is often believed to be less complicated than the external environmental analysis, as the organisation should have information readily available about itself (Hamel & Prahalad, 1994). If this is not the case, however, the company can initiate activities to obtain the necessary information (Hamel & Prahalad, 1994).

There is no consensus as to a single approach to conduct an internal analysis. Academics and authors have proposed a SWOT analysis (Porter, 2008), a value chain analysis (Gică, 2011), or the internal resource analysis (Elshamly, 2013). Their common goal is identifying the resources, capabilities and competencies required to give the firm a competitive advantage.

Environmental scanning has become an increasingly popular research topic as part of the planning process amongst SMEs. The research has found that environmental scanning is not limited to large corporates with planning departments, but is carried out by SMEs (Pollard &

Hayne, 1998). Although some researchers originally proposed that environmental scanning in SMEs was unstructured, unplanned and informal, Analoui and Karami (2003) found that, in many SMEs, scanning is a mix of formal and informal practices based on the information needed and the urgency. Finally, Berry (1996) found that strategic awareness and the perception of the benefit of environmental scanning had a significant influence on the success and long-term survival of SMEs.

From this section, it can be concluded that environmental analysis consists of 4 activities: (1) analysing the internal environment, (2) analysing the external environment, (3) evaluating the various opportunities present both now and in the future and (4) identifying the requirements for strategic fit.

4.6.2.1.2 FORMULATION

Once the environmental analysis has been completed, a firm has to formulate its strategy. Strategic planning has been proposed as the main tool during the strategy formulation phase of the strategy process (Barnes, 2002) (Côté, et al., 2005) (O'Regan & Ghobadian, 2002) (O'Regan & Ghobadian, 2007). Unfortunately, the use of a strategy formulation tool does not guarantee an effective strategy and subsequent success, and the effectiveness of a strategy can only be known after it is implemented.

Researchers propose that a lack of strategic planning among SMEs is a significant contributor to poor growth and failure (O'Regan & Ghobadian, 2004), and that a large portion of SMEs demonstrate weak strategic planning (Elshamly, 2013), with few SMEs engaging in strategic planning on a regular basis (Elshamly, 2013). Successful SMEs spend more time, on strategic planning, as opposed to unsuccessful SMEs (O'Regan & Ghobadian, 2007).

Strategy planning activities within an organisation result in strategy content, which includes the elements of “Mission”, “Vision” “Objective”, “Goals”, “Strategies”, and “Policy” (Gică, 2011). Each of these elements should be based on the outcome of the environmental analysis phase and the proposed strategies within the strategic hierarchy of the firm. Dess and Miller

(1993) argued that strategies can be defined within three linked and interdependent hierarchies, namely: Corporate strategy, Business strategy, and Functional strategy

- **Corporate Strategy:** As the first level of strategy, this is concerned with determining what the business should be doing and, equally importantly, what the business should not be doing and how these activities should be structured and managed (Analoui & Karami, 2003) (Thompson, 2001). According to Analoui and Karami (2003), this level determines the firm's overall mission and objectives validates proposals emerging from the lower business and functional strategic levels, and assigns resources with a sense of strategic priority.
- **Business Strategy:** The level is responsible for creating and maintaining strategic advantages in each of the business units through a single function or combination of functions. According to Wheelan and Hunger (1998), the business strategy is formulated at the business unit or product level and is concerned with the competitive advantage of the business unit's product or service within a certain industry or market segment.
- **Functional Strategy:** This is concerned with the functional areas of the firm, including but not limited to marketing, human resources, finances and research and development. Functional strategy considers the approach taken by each functional unit to achieve the business and corporate objectives in a resource efficient manner (Wheelan & Hunger, 1998). It is important to note that not all of these functions lie within the direct control of the firm and may include partners, financiers, suppliers and other external parties. In order to achieve the corporate and business units' objectives, the functions have to be designed, managed and co-ordinated in an interconnected manner (Analoui & Karami, 2003).

According to Andrews (1971), a firm's realised strategy, which is the result of strategy formation, is a function of the patterns of these three layers, and a product of all three layers simultaneously, with functional strategies supporting business strategies, which in turn support corporate strategy.

As explored above, the second phase in the strategy process encompasses strategy formulation, consisting of the following activities (Analoui & Karami, 2003) (Casadesus-Masanell & Ricart, 2010) (Gică, 2011) (Karami, 2016) (O'Regan & Ghobadian, 2004) (De Wit & Meyer, 2010):

- Developing a mission and vision statement, setting goals and objectives.
- Engaging in strategic planning.
- Identifying strategic alternatives.
- Strategy reformulation.

A number of authors have reviewed the importance of and the characteristics of a successful vision and mission statement in SMEs (Karami, 2016) . According to Campbell and Yeung (1991), for instance, a mission statement defines what the organisation is now, whereas a vision statement describes what the organisation aspires to become. Research has found that, in large corporates as well as SMEs, mission and vision statements are both descriptive and prescriptive (Campbell & Yeung, 1990) (Pearce & Robinson, 1994). In order for a vision and mission statement to be effective, it must be clearly understood by all stakeholders; most importantly, it should highlight the organisation's unique reason for being and energise all stakeholders to pursue a common goal. According to Ackoff (1987), a successful mission and vision statement include the following 5 characteristics:

- Define the business in which the firm wants to operate
- Differentiate the firm from its rivals
- Enable the firm to form objectives
- Be exciting and motivating
- Be relevant to all stakeholders both inside and outside of the firm.

According to Lynch (2000), the uniqueness of each firm should be reflected within the vision and mission statement of the firm, and thus these statements should contain the following 5 elements:

- Consideration for the nature of the firm's business

- Responses to be considered from the customer's perspective and not just from the organisation's perspective
- Reflecting the basic values and beliefs of the organisation
- Reflecting the element of sustainable competitive advantage
- Summarising the main reason for the firm's choice of approach.

Therefore an effective mission and vision statement clarifies the purpose of the firm and the business the firm wants to operate in, and thus should provide plausible answers as to why the firm exists (Analoui & Karami, 2003). The statement should differentiate the firm from its existing and potential future rivals (Karami, 2016). The statement should allow the firm to formulate its short-, medium- and long-term objective (Pearce & Robinson, 1994). The statement should create a sense of excitement and motivation; researchers have found that employees' motivation is connected to their participation and contribution to decision making (Analoui & Karami, 2003). These statements should therefore allow employees to reflect upon the company's mission and vision, and involve their decision making. Finally, the statement must be clear and simple to understand for all stakeholders; it should thus focus on a small number of issues in order to avoid confusion and diluting the core elements (Darbi, 2012).

The outcome of the strategy formulation phase, namely strategy content, becomes the input to the subsequent phase of strategy implementation. Consequently, strategy content is seen as a critical link between these two phases of strategy formulation and implementation. As a result researchers propose that strategies fail due to an overly complicated communication procedure and possible miscommunication and misinterpretation between environmental scanning, strategy formulation and strategy implementation. Effective communication is thus seen as critical for the successful progression of strategy formulation between the different phases (Analoui & Karami, 2003).

4.6.2.2 Strategy Implementation

The third phase within the strategy process is strategy implementation; this is just as important and perhaps even more difficult than strategy formulation, as strategies can only be successful if they are implemented (Li, et al., 2008).

The definition of what constitutes strategy implementation varies, although authors agree that the process is dynamic, interactive and complex (Li, et al., 2008). According to Elshamly (2013), strategy implementation is defined by a set of decisions, which set in motion activities throughout the organisational hierarchy in order to achieve strategic objective of the strategic plan. Moreover, according to Hitt, et al., (2012), strategy implementation involves the process of initiating business practices and policies, as defined in the strategy from the strategy formulation phases.

As with the definition there is no consensus regarding the key success factors of strategy implementation. According to Gica (2011), successful strategy implementation requires four factors, namely: Culture, organizations, human resources, control system and tools. Louw and Venter (2006) defined the key success drivers as: Leadership, organizational culture, reward systems, organizational structure and resource allocation. Similarly, Pryor, et al., (2008) defined the five 'Ps' of successful strategy implementation as Purpose, Principles, Process, People, and Performance.

Other authors (Raps, 2004) (Atkinson, 2006) argue that successful strategy implementation goes beyond listing a number of factors; instead, it includes resource allocation, communication, consistency and flexibility:

- **Resource Allocation:** According to Raps (2004) successful strategy implementation is dependent on the successful allocation and management of human and financial resources.
- **Communication:** In the same vein, the successful management of resources requires successful communication and feedback from the top down and bottom (Atkinson, 2006).

- **Consistency:** The concept of implementing strategy consistently has been recognised as critical to successful strategy implementation. According to Harrison and Pelletier (2001), consistent strategy implementation is realised through consistent actions towards a desired goal.
- **Flexibility:** Companies and their strategies ultimately interact with a dynamic external environment and although the concept of flexibility in strategy implementation may superficially seem to be in contrast to consistency, flexibility is needed to achieve strategic goals (Slevin & Covin, 1997). Goals should remain consistent, and consistent actions responding to changes in the environment make flexibility strategic (Burgelman & Grove, 1996).

With regard to SMEs, the strategy implementation phase is viewed as critical to a successful strategy process (Analoui & Karami, 2003). Authors (Côté, et al., 2005) (O'Regan & Sims, 2005) (Analoui & Karami, 2003) (Elshamly, 2013) (De Wit & Meyer, 2010) propose the activities associated with successful strategy implementation include:

- Strategic execution.
- Implementation of tactics.
- Strategy communication.
- Allocating and aligning resources.
- Change management.

Although all the activities mentioned above are important, change management is viewed as critical in order to achieve strategic fit (Li, et al., 2008) (Pryor, et al., 2008) as it aims to manage the interaction of the strategy with the external environment. If this interaction is not appropriately managed, then a new unwanted strategy may emerge or the strategy could be ineffectively deployed, resulting in sub-optimal results (Li, et al., 2008) (Pryor, et al., 2008).

4.6.2.3 Review and Control

Within the final phase of the strategy process, recognising that the strategy process is circular, is strategy review and control. This phase has two functions (Elshamly, 2013), namely: (1) to

measure the performance of strategy implementation and execution, and (2) to evaluate the performance of the strategy itself and whether the strategy should be reformulated. Thereafter, the strategy formulation phase becomes the strategy reformulation phase, during which changes are made to make the strategy and its implementation more effective. Both of these functions are necessary for successful strategy implementation (Atkinson, 2006).

According to Dooley, et al., (2000), strategic control focuses on determining whether the strategic goals have been achieved and verifies the results. In this regard, Bowman and Helfat (2001) found that, if management was unsuccessful in implementing a strategy control system, then strategy implementation would suffer. Even if the strategy was implemented successfully, the control system could reveal that strategy execution could be improved by reformulating the strategy (Elshamly, 2013).

With the results of strategy control, management has an opportunity to review the effectiveness of the ultimate strategy; this review is contingent on the firm's ability to self-appraise and learn. Two forms of organisational learning are proposed in this regard, namely: (1) single loop learning and (2) double loop learning (Blackman, et al., 2004). Single loop learning is perceived as the simpler and most common approach to organisational learning; it involves problem solving and learning based on measuring the difference between actual and expected results. After measurement, the actions that produced the results will be altered, with the outcome re-measured. Simply put, single loop learning is concerned with asking, "are we doing things right?" Double loop learning attempts to make more drastic changes to the fundamental structure of the organisation by asking, "are we doing the right things?" Double loop learning is concerned with examining the underlying assumptions behind the actions and behaviour, and it seeks to correct the errors during the learning cycle (Blackman, et al., 2004). According to the literature, single loop learning falls short of assessing whether the ultimate strategy is correct, and thus it is recommended that organisations employ double loop learning during strategy reformulation (Blackman, et al., 2004) (Elshamly, 2013) (Gică, 2011).

In order to assess whether strategy implementation has achieved the strategic objectives against the backdrop of a dynamic and ever changing internal and external environment, it is

necessary for the strategy review and control process to be continuous (Gică, 2011). Double loop learning during strategy evaluation and reformulation similarly requires management to modify the strategy to meet the strategic objective, and it requires the strategy control method to be modified to measure the implementation of the new strategy (Elshamly, 2013) (Gică, 2011).

According to the literature, the process of review and control consists of the following activities (Analoui & Karami, 2003) (De Wit & Meyer, 2010) (Elshamly, 2013) (Gică, 2011) (O'Regan & Ghobadian, 2002):

- Gathering feedback.
- Revision and learning.
- Identify corrective action to overcome issues.
- Identify preventative actions to prevent issues.

Authors (Côté, et al., 2005) (Elshamly, 2013) (Analoui & Karami, 2003) suggests that strategy review and control are both of equal importance to SMEs, with this phase requiring SMEs to revise and reformulate their product, services, markets, and technologies to ensure that the organisation is competitive.

4.6.2.4 Research Sub Question

Reviewing the section above allows this dissertation to partially address the relevant sub-research question and achieve the sub-research objective, as illustrated in Table 24 below:

Table 24 - SRQ8 and SRO8

CODE	Research Question	CODE	Objective/Solution
SRQ8	How are successful strategies formed in SMEs?	SRO8	Define the requirements for successful strategy formulation in SMEs.

As is evident from the literature review many of the strategic management activities utilised by larger corporates are also applicable and beneficial to SMEs and new ventures.

Accordingly, the following requirements are associated with these activities in SMEs, taking into account that this dissertation is limited to a strategy formulation framework and therefore will not include business and functional strategies nor strategy implementation.

- **R19:** The framework will require the user(s) to develop the firm's strategic awareness by exploring and debating the firm's strengths, weaknesses, opportunities and threats through environmental scanning and by reviewing the firm's internal and external context.
- **R20:** The framework will require the user(s) to develop strategic alternatives with regard to the firm's context, and to make the necessary strategic choices, which will drive the rest of the process.
- **R21:** The framework will require the user(s) to develop a sense of purpose by developing suitable mission and vision statements, which provide clarity, focus, direction, differentiation, and motivation and support decision making associated with emerging strategy.
- **R22:** The framework will require the user(s) charged with executing the strategy to develop short- and medium-term objectives for future review.
- **R23:** The framework will require the user(s) to develop a visual and effective means of communicating the strategy content in support of successful strategy implementation.
- **R24:** The framework as a continuous tool will require user(s) to assess and review the success of the strategy against the objectives and require them to answer where they are not only 'doing things right', but are also 'doing the right things'.

4.7 Current Models

The purpose of this section is review whether any existing models incorporate the requirements associated with successful strategy formulation in SMEs.

As to the question whether SMEs can directly utilise the processes, models and frameworks of developing corporate strategies that are used in larger firms, Wheelan and Hunger (1998), Robinson, et al., (1991)and Analoui and Karami (2003) all argue that the answer is no. These

authors instead argue that the strategy management processes of larger firms do not suit small businesses or new entrepreneurial ventures due to three critical elements, namely: (1) SMEs are characterised by resource shortcomings and therefore cannot simply rely on finding external opportunities, i.e., they have to view the opportunity in light of their internal capabilities (strengths and weaknesses); (2) SMEs have to more closely consider the goals of the SME owner and management as their business may not wish to be the next global powerhouse; and (3) rather than reviewing opportunities in light of the firm's mission, vision and strategy, they must develop new missions, objectives, strategies and policies out of a comparison of their external opportunities and threats to their potential strengths and weaknesses.

Consequently, Wheelan and Hunger (1998) have proposed their own modified version of the strategic management model, which they argue more closely suits SMEs and entrepreneurial firms; it consists of 8 interrelated steps and is illustrated in Figure 30:

1. Develop the basic business idea: This requires identifying a product or service and a potential market or customer.
2. Scan and assess the external environment: This step involves scanning the external task environment and includes identifying current and future market potentials and threats as well as availability and access to external resources.
3. Scan and assess the internal environment: This step requires the firm to assess its internal resource base against the requirements of the business idea, as well as the motivation of the entrepreneur or management.
4. Analyse the strategic factors: Review the various strategic options against a SWOT analysis.
5. Decide Go-no-Go: If the basic business idea seems feasible, the process can continue; alternatively, it could be further developed by reverting to the first step.
6. Generate a business plan: Should the firm decide that the business idea is feasible, a business plan should be developed, describing how the idea will be transformed into reality via the mission, objectives, strategies and policies.

7. Implement the business plan: The business plan should be implemented via a project plan and action steps.
8. Evaluate performance: The business should be evaluated against projections; should the actual results differ from the projections, the firm should reconsider the business idea, the external and internal factors that informed the strategy, and the business plan.

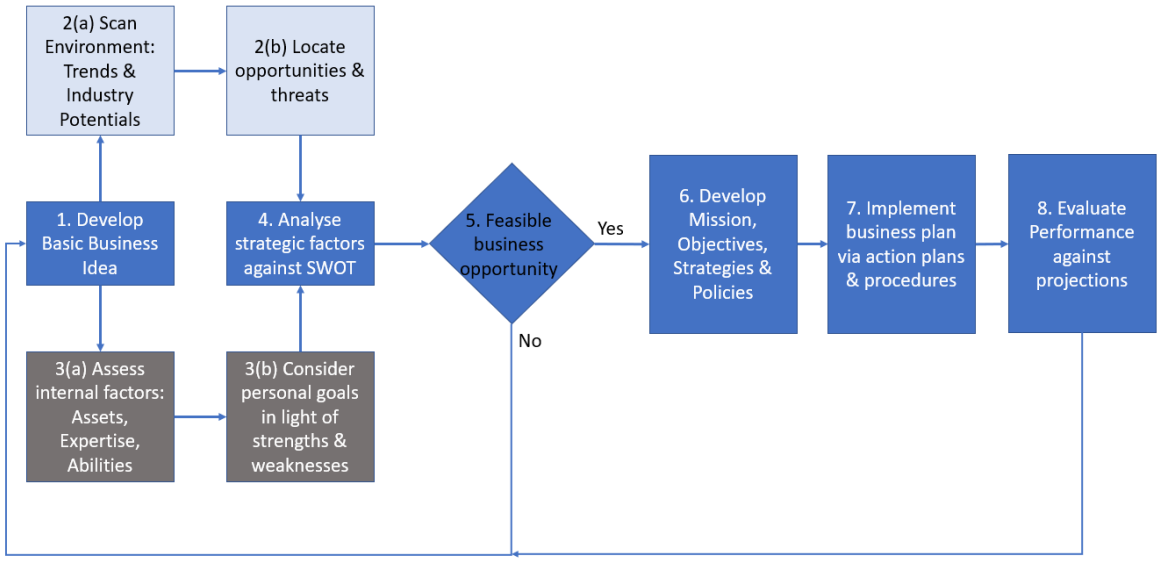


Figure 30 - Strategic Decision-Making for SMEs (Analoui & Karami, 2003, p. 56)

Analoui and Karami (2003) reviewed the various strategic management models proposed in the literature for SMEs, including those of (Linneman, 1980) (Green & Jones, 1982) (Shuman & Seeger, 1986) (Aram & Cowan, 1990) (Foster, 1993) (Pearce & Robinson, 1994) (Berry, 1996) (Wheelan & Hunger, 1998) (Beal, 2000) and found that there was substantially no difference in the models proposed.

Analoui and Karami (2003) point out that the models all employ the four basic elements of the strategy process of environmental scanning, strategy formulation, strategy implementation and evaluation and control in an attempt to answer 6 questions:

- What is our business?
- Where are we now?

- Where do we want to be?
- How are we going to get there?
- Which way is the best?
- Shall we do it?

Analoui and Karami (2003) criticise these models as taking a broad view of stakeholders and of being competitor driven. In response, they incorporate the new customer value perspective in introducing the “Dynamic SME Strategic Management Model”. Analoui and Karami propose that strategic management in SMEs be a dynamic sequence of the following activities, illustrated in Figure 31 below.

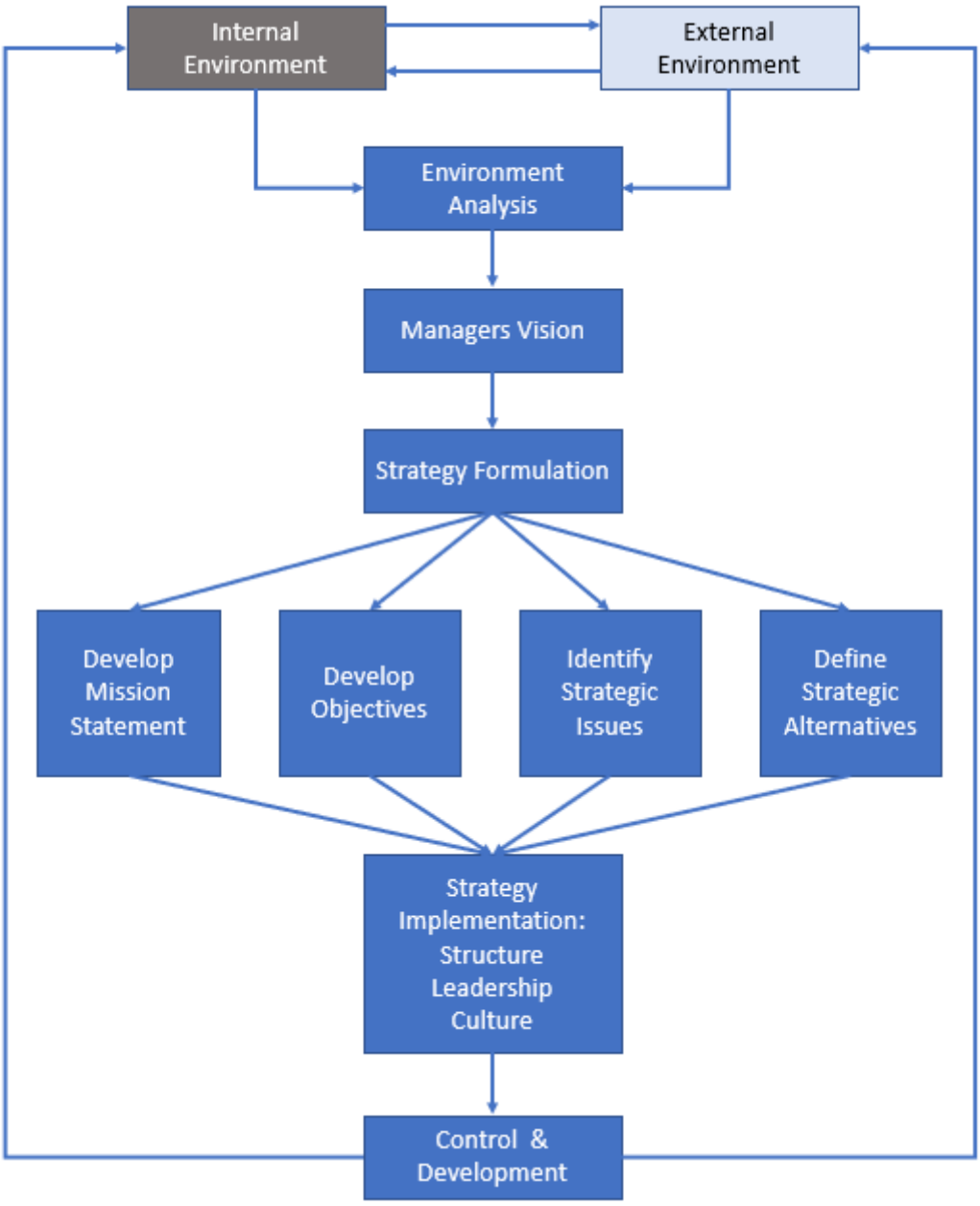


Figure 31 - Dynamic SME Strategic Management Model (Analoui & Karami, 2003, p. 59)

According to Analoui and Karami (2003) the Dynamic SME Strategic Management Model:

> *"describes a process by which small and medium-size enterprises determine their purpose, objectives and desired levels of attainment; decide upon actions for achieving those objectives in an appropriate timescale and frequently in a changing environment; implement the actions and assess progress made by evaluating the results". (Analoui & Karami, 2003, p. 58)*

The ‘customer value’ perspective within the model is derived from setting ‘the enhancement of customer value’ as a strategic objective, identifying key improvement areas, and monitoring and reviewing the level and improvement of customer value after the strategy is implemented.

Reviewing the characteristics associated with successful strategy formulation in SMEs, as derived within this chapter, reveals that the model of Analoui and Karami has certain shortcomings:

1. The focus on the customers seems to be after the fact rather than critically assessing the fundamental customer requirements, as proposed by blue ocean strategy.
2. The model does not address the risk associated with market adoption as presented in SME survival and growth literature, as advocated by blue ocean strategy.
3. The model does not address the need to establish the legitimacy of the firm on both the ‘micro’ (task and individual) level as well as the ‘macro’ (institutional form) level to foster market adoption and access to resources under the control of internal and external stakeholders.
4. The model does not review the micro elements and clearly communicable structure associated with business model development.
5. Where the model, like all other models, requires the user(s) to define the strategic alternatives, there is no focus on reducing or negating the need for partners, resources, capabilities and competencies.
6. The model does not address the risk associated with implementation within the product and management domains, as proposed by the liability of newness concept and advocated by blue ocean strategy.
7. The model seems pre-occupied with existing market opportunities rather than creating new markets, as advocated by the dynamic capabilities perspective and blue ocean strategy.
8. Additionally, the model does not allow for the concept of isolating mechanisms, which would allow for a sustained competitive advantage.

Therefore, in support of the need for this dissertation, and to answer the main research question, it is evident that the current strategy development models do not effectively take into account all the requirements for successful strategy formulation, and that a framework which addresses this problem remains outstanding.

4.8 Requirement Consolidation

The purpose of this section is to carry out the methodology described in Section 2.8.2 and consolidate any overlapping requirements developed within the chapter, with the subsequent encompassing requirements informing the ultimate conceptualisations of the solution.

With the study utilising systems engineering as the research method, as illustrated in the research design below (Figure 32), the following section executes the first 3 steps in Jabareen's (2009) framework development methodology (discussed in Section 2.6.4) by developing a set of solution requirements associated with the domain of strategy.

As was discussed in relation to the survival and growth of new ventures and SMEs, the requirements developed from the literature revealed that a number of characteristics, which support successful strategy formulation in SMEs are similar between the fields reviewed.

Once more, the process of consolidation entailed determining the overlap between the various requirements and subsequently identifying unifying constructs or themes. In order to verify the validity of the encompassing requirements, a matrix was utilised to assess whether the new requirements address all of the original requirements derived from the literature (Figure 33).

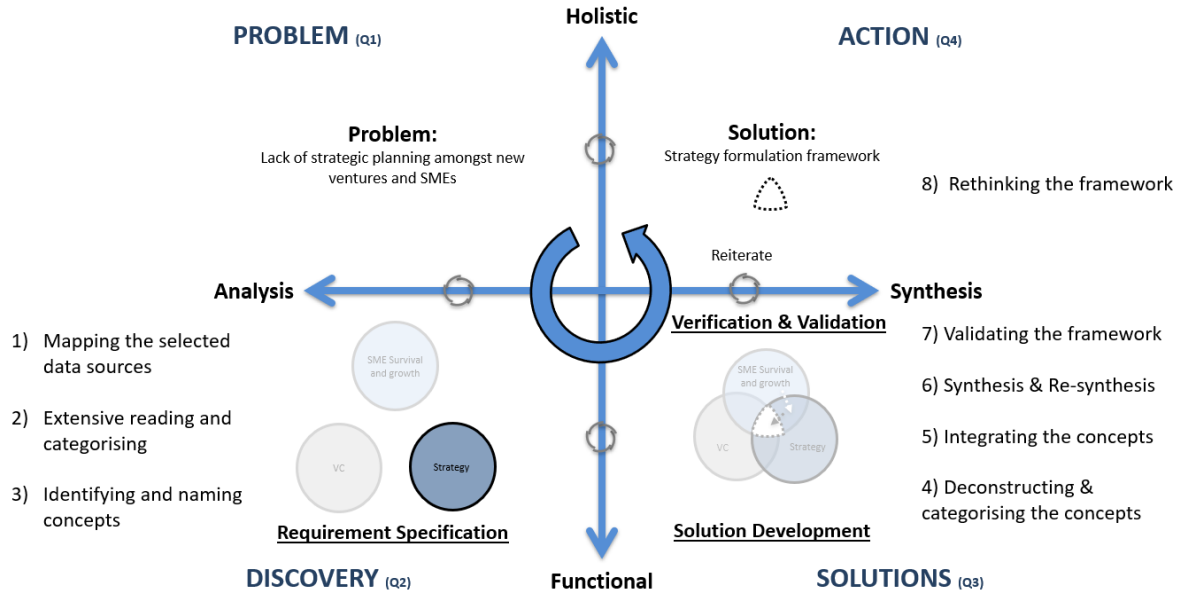


Figure 32- Research Design, Strategy Formation & Formulation

For ease of reference the original requirements from literature are listed below:

- **R1:** The framework will require the user(s) to define existing and future success potentials.
- **R2:** The framework will require the user(s) to define the criteria to achieve current and future operational excellence.
- **R3:** The framework will require the user(s) to assess and explore the client's current, future and as yet unknown needs.
- **R4:** The framework will need to illustrate the strategy formation process and allow the user(s) to understand the interplay between formal strategy formulation and emergent strategy realisation.
- **R5:** The framework will require the user(s) to state whether they believe the right people, practices and praxis are present to support successful strategy formulation.
- **R6:** The framework will require the user(s) to explore and state the purpose of the strategy event, which may be reviewed throughout the process.
- **R7:** The framework will require the user(s) to explore the current and future internal (micro elements/business model) and external context to the firm.

- **R8:** The framework will need to present the elements of successful strategy formulation against the backdrop of SME survival and growth perspective.
- **R9:** The framework will require the user(s) to review the strategy content against the backdrop of the 5 Ps of strategy:
    - Plan: Does it provide a course of action?
    - Ploy: Does it take into account and 'negate' the potential actions of competitors?
    - Pattern: Does it outline a consistency in behaviour or actions to achieve a desired outcome?
    - Position: Does it provide information as to the firm's position relative to those of competitors? and
    - Perspective: Does it clearly communicate the firm's understanding of the internal and external contexts that informed the strategy?
- **R10:** The framework should be easily understood and be executable in a short time period.
- **R11**: The framework should support the strategic imperatives of new ventures and SMEs.
- **R12:** The framework should eliminate bureaucracy and domination by senior personnel and support wider involvement.
- **R13:** The framework should foster sense making, creativity, improvisation, flexibility and innovation.
- **R14**: The resulting framework should ascribe to and support the success criteria as derived by Lofving, et al., (2014).
- **R15:** In accordance with the positioning perspective, the framework will require the user(s) to identify an unmet fundamental customer need, rather than inferring their needs from current offerings or providing minor differentiation points, with favourable strategic characteristics now or pursuant to the implementation of isolating mechanisms.
- **R16:** In accordance with the resource based and dynamic capabilities perspective, the framework will require the user(s) to fundamentally assess and reduce or negate the

need for partners, resources, capabilities and competencies required to deliver value to the customer rather than inferring these value chain requirements from current industry infrastructure.

- **R17:** The framework will have to support the 6 principles of blue ocean strategy.
- **R18:** The framework will require the user(s) to map the micro elements of the business model in light of the intended strategy and competitors on a suitable, easily communicable canvas.
- **R19:** The framework will require the user(s) to develop the firm's strategic awareness by exploring and debating the firm's strengths, weaknesses, opportunities and threats through environmental scanning and by reviewing the firm's internal and external context.
- **R20:** The framework will require the user(s) to develop strategic alternatives with regard to the firm's context, and to make the necessary strategic choices, which will drive the rest of the process.
- **R21:** The framework will require the user(s) to develop a sense of purpose by developing suitable mission and vision statements, which provide clarity, focus, direction, differentiation, and motivation and support decision making associated with emerging strategy.
- **R22:** The framework will require the user(s) charged with executing the strategy to develop short- and medium-term objectives for future review.
- **R23:** The framework will require the user(s) to develop a visual and effective means of communicating the strategy content in support of successful strategy implementation.
- **R24:** The framework as a continuous tool will require user(s) to assess and review the success of the strategy against the objectives and require them to answer where they are not only 'doing things right', but are also 'doing the right things'.

Utilising the methodology of identifying unifying constructs and themes (categorising), the dissertation developed the following encompassing requirements (designated by the prefix STRAT) (see Table 25 below), associated with successful strategy formulation in SMES.

Table 25 - Strategy Consolidated Requirements

New Requirement Identifier	Rationale
STRAT - 1	**Related Original Requirements:** R4, R5, R8 **Unifying theme or construct:** Strategy as Practice **Requirement:** The framework will need to illustrate the elements of successful strategy formulation and allow the user(s) to understand the interplay between formal strategy formulation and emergent strategy realisation against the backdrop of the factors that affect SME survival and growth. **Theoretical Foundation:** Strategy Formation (Section 4.3.3) and SMEs and Formal Strategic Planning (Section 4.4.3) **Motivation:** Successful strategy formulation is a function of tacit knowledge regarding (1) the factors that determine SME survival and growth and (2) successful strategy formulation as a dynamic process that combines the elements of planning and learning.
STRAT - 2	**Related Original Requirements:** R1, R3, R15, R17 **Unifying theme or construct:** Customer **Requirement:** The framework will require the user(s) to explore and define their understanding of the customer context and identify the customers' current and future and what may be unknown core needs. **Theoretical Foundation:** Dual Components of Strategy (Section 4.3.1) and Strategy Perspectives (Section 4.6.1) **Motivation:** With a company's competitive advantage stemming from a difference in value as perceived by the customer, a company's long-term survival is a function of sustaining this competitive advantage by understanding the customer's current and changing future needs.
STRAT – 3	**Related Original Requirements:** R1, R9, R15, R17, R19, R20 **Unifying theme or construct:** External Context **Requirement:** The framework will require the user(s) to explore and define their understanding of the firm's external context and identify alternate existing and future success potentials with favourable strategic characteristics now or pursuant to the implementation of isolating mechanisms.

New Requirement Identifier	Rationale
	Theoretical Foundation: Strategic Management (Section 4.2), Strategy Dimensions (Section 4.3.3.4) and Strategy Perspectives (Section 4.6.1) **Motivation:** With a competitive advantage being a function of sustaining a difference in value as perceived by the customer, firms have to be cognisant of current and changing external market conditions, which may affect the firm's own value delivering capabilities and those of competitors.
STRAT – 4	**Related Original Requirements:** R2, R7, R9, R11, R16, R17, R19, R20 **Unifying theme or construct:** Internal Context **Requirement:** The framework will require the user(s) to explore and define their understanding of the firm's internal context and assess the alternate means to reduce, negate or recombine the partners, resources, capabilities and competencies as internal success criteria to effect current and future operational excellence in light of the success potentials. **Theoretical Foundation:** Strategic Management (Section 4.2), Strategy Dimensions (Section 4.3.3.4) and Strategy Perspectives (Section 4.6.1) **Motivation:** With a competitive advantage being a function of value delivery, the firm has to assess the alternate and most efficient means to acquire and institute the success criteria to deliver value to the customer in accordance with their current and future needs.
STRAT – 5	**Related Original Requirements:** R7, R16, R18 **Unifying theme or construct:** Business Model **Requirement:** The framework will require the user(s) to map the micro elements of the business model and isolating mechanism(s) in light of the intended offering, strategy and competitors on a suitable, easily communicable canvas. **Theoretical Foundation:** Business Model (Section 4.6.1.3) **Motivation:** Business models serve as a bridge between the emerging and deliberate planning perspectives, and with SMEs being characteristically faced with resource shortcomings, this allows firms to assess their success requirements and value delivering capabilities on a micro level.
STRAT – 6	**Related Original Requirements:** R2, R3, R4, R17 **Unifying theme or construct:** Blue ocean strategy **Requirement:** The framework will require the user(s) to align the intended strategy with the paradigms of blue ocean strategy. **Theoretical Foundation:** Strategy Perspectives (Section 4.6.1) **Motivation:** Blue Ocean as a strategy perspective benefits from historical hindsight and recommends not making the mistakes of previous strategy

New Requirement Identifier	Rationale
	practitioners by proposing principles to identify value offerings corresponding to uncontested market spaces rather than competing in contested 'Red Oceans'.
STRAT – 7	**Related Original Requirements:** R6, R9, R21 **Unifying theme or construct:** Purpose **Requirement:** The framework will require the user(s) to develop a sense of purpose by developing a suitable mission and vision statement that may be reviewed throughout the process. **Theoretical Foundation:** Strategy Dimensions (Section 4.3.3.4) **Motivation:** A sense of purpose not only initiates and guides the strategy formulation process with regard to strategic thinking and evaluating strategic alternatives, but as an organisation principle it can guide the daily activities and decisions of management and employees in pursuit of the firm's strategic goals.
STRAT - 8	**Related Original Requirements:** R9, R21 **Unifying theme or construct:** Action **Requirement:** The framework will require the user(s) charged with executing the strategy to develop short- and medium-term objectives for future review. **Theoretical Foundation:** Strategy Formation (Section 4.3.3) and Strategy Process (Section 4.6.2) **Motivation:** Short- and medium-term goals initiate the strategy formation process and set in motion certain actions that will realise the strategy and provide a baseline from which the firm can review performance and their assumptions.
STRAT – 9	**Related Original Requirements:** R9, R23 **Unifying theme or construct:** Content **Requirement:** The framework will require the user(s) to develop a visual and effective means of communicating the strategy content in support of successful strategy implementation. **Theoretical Foundation:** Strategy Formation (Section 4.3.3) and Strategy Process (Section 4.6.2) **Motivation:** Strategy content as the output of the strategy process informs internal and external stakeholders of the beliefs and assumptions of the strategy formulators and guides the daily decisions and actions of management and employees in pursuit of the firm's strategic intent.
STRAT – 10	**Related Original Requirements:** R4, R6, R23 **Unifying theme or construct:** Review

New Requirement Identifier	Rationale
	Requirement: The framework as a continuous tool will require user(s) to assess and review the success of the strategy against the objectives and require them to answer whether they are not only 'doing things right', but are also 'doing the right things'. **Theoretical Foundation:** Strategy Formation (Section 4.3.3) and Strategy Process (Section 4.6.2) **Motivation:** Reviewing the success and modification of the firm's strategy as it is deployed on a daily basis allows the strategy formulators to challenge and modify the firm's purpose and assumptions in order to derive better strategies.
STRAT - 11	**Related Original Requirements:** R10, R11, R12, R13 **Unifying theme or construct:** Process **Requirement:** The resulting framework should ascribe to and support the success criteria as derived by Lofving, et al., (2013). **Theoretical Foundation:** Strategy Formulation Characteristics for SMEs (Section 4.5) **Motivation:** The process criteria as proposed by Lofving are our best practice understanding of the procedural requirements that enable successful strategy formulation by supporting the strategic imperatives of SMEs and taking into account their unique characteristics.

As indicated in the matrix in Figure 33 below, the new encompassing requirements (vertical axis) were compared to the original requirements (horizontal axis) derived from literature. The matrix verifies that the new requirements address all of the original requirements.

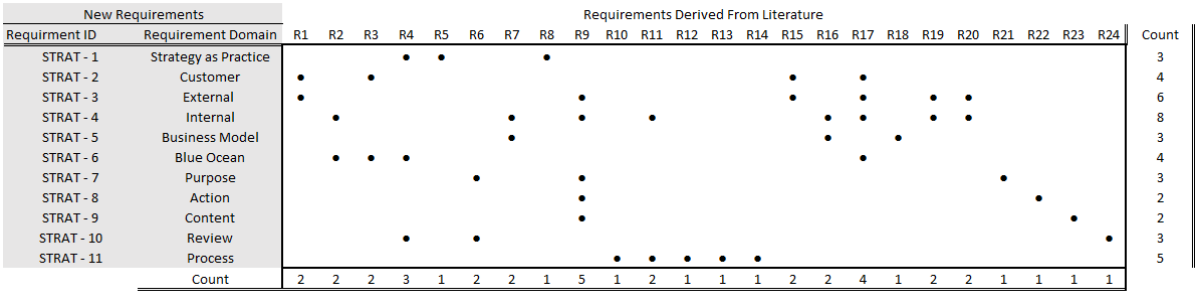


Figure 33 - Strategy Requirement Comparison Matrix

As was the case with the requirements associated with the domain of SME survival and growth, the consolidated requirements derived in Table 25 are functional requirements as categorised by Van Aken, et al., (2006)(see Section 2.5) as they dictate performance demands and specific functions the framework has to accomplish, i.e., specific results the framework has to deliver.

4.9 Chapter Conclusion

By exploring the sub-research questions, in accordance with the research methodology, this chapter successfully met the sub-research objectives (see Table 26Table 26 - Sub-Research Question and Sub-Objective Completion) by reviewing the purpose of strategic management, modern theory's understanding of the requirements for successful strategy formation, the definition of strategy, and the arguments in favour of and requirements associated with formal strategy formulation activities in SMEs.

The review of modern theory revealed that current models do not incorporate current best practices and our understanding of the considerations, which need to be taken into account to develop successful strategies in SMEs. Consequently, the continued development of the solution to the problem identified in Chapter 1 remains necessary.

With SMEs being characteristically different from their larger corporate counterparts, the chapter revealed a number of unique considerations that have to be taken into account to effect successful strategy formulation in SMEs. These considerations were captured in the requirements derived throughout the chapter and consolidated in Section 4.8. These requirements will inform the final solution during the synthesis of the various domains in part three of this document.

Table 26 - Sub-Research Question and Sub-Objective Completion

CODE	Research Question	CODE	Objective/Solution	Section(s) Answered /Achieved
SRQ5	What is strategy and what is strategic management?	SRO5	Define and understand the purpose of strategy and strategic management.	4.2.1 & 4.3.2 & 4.3.4
CODE	**Research Question**	**CODE**	**Objective/Solution**	**Section(s) Answered /Achieved**
SRQ6	How are strategies formed?	SRO6	Understand how strategies are successfully formed.	4.3.4
SRQ7	Should SMEs formulate strategies?	SRO7	Define the supporting arguments related to formal strategy formulation in SMEs.	4.4.4
SRQ8	How are successful strategies formed in SMEs?	SRO8	Define the requirements for successful strategy formulation in SMEs.	4.5.4 & 4.6.1.4 & 4.6.2.4

Chapter 5 – Venture Capital and SMEs

The purpose of this chapter is to explore the arguments in favour of obtaining venture capital funding to support SME survival and growth.

5.1 Introduction

As discussed in Chapter 3, there is a strong link between a firm's chances of survival and growth and its access to resources. Specific attention from academia and practice is given to that of financial resources, due to the ease with which these can be converted into other resources (Cook & Nixson, 2000). Although it is possible for a new firm in its initial period to be started and sustained from the resource base of the founders and their immediate network, the financial resources required to grow the business are often beyond the resource base of the founder (Gilbert, et al., 2006).

When government support is lacking, an SME's probability of survival and growth is linked to the founder's and/or management's ability to attract funding from external funders, such as investors and banks (Gilbert, et al., 2006). However, due to the risk, lack of track record and lack of asset base associated with new and small ventures, it is often impossible to source funding from traditional capital markets and debt funders such as banks.

Consequently, Dickinson (Dickinson, 2007) states that private equity, and more specifically venture capital (VC), as a subset of private investor capital, which can provide finance to firms

within the seed, start-up and development phases, plays an important role in addressing this gap between the entrepreneur financing the business himself and that of conventional capital market activity in growing private enterprises.

Additionally, private equity investors, and by implication VC investors, contribute more than just financial resources to an SME; it includes business expertise, training and networks and therefore is said to be more efficient than direct foreign investment or similar arm's length financial support, where non-financial contributions are not guaranteed (Snyman, 2012). Dickinson (2007) thus argued that VC can address some of the characteristic shortcomings of SMEs, not just financial ones.

In accordance with the research strategy a number of sub-research questions and sub-objectives were developed in Section 1.5 to understand the role of VC in SME financing, SME survival and growth and the alignment between VC decision criteria and the elements that impact upon SME survival and growth and successful strategy formulation.

For ease of reference Table 27 below outlines the sub-research questions and objectives in pursuit of answering the primary research question:

How can an SME be guided to formulate a strategy?

Table 27 - Research Questions SRQ9 to SRQ12 and Objectives SRO9 to SRO12

Domain	CODE	Research Question	CODE	Objective/Solution
Venture Capital	SRQ9	What is VC?	SRO9	Introduce and define the purpose of VC.
	SRQ10	How does VC affect new venture survival and SME growth?	SRO10	Understand the reason to support the use of VC.
	SRQ11	What decision criteria influence VC decisions?	SRO11	Understand the decisions associated with awarding VC to new ventures and SMEs.
	SRQ12	How are VC decision criteria aligned with the factors that influence SME survival and	SRO12	Understand the alignment of VC decision criteria to the factors that influence SME survival and

		growth as well as successful strategies?		growth as well as successful strategies?

In order to understand the arguments for the use of VC in SMEs and the contribution to SME survival and growth, this chapter will explore sub-research questions SRQ9, SRQ10 and SRQ11 to understand (1) the funding options available to SMEs, (2) the argument for the use of VC, and (3) the process associated with obtaining VC and the VC assessment criteria.

In accordance with the methodology, once VC as a funding choice is validated and the VC decision criteria are understood, Chapter 6, which effects the synthesis process of the systems engineering method, will review the alignment between the VC decision criteria and the factors that affect SME survival and growth and successful strategy formulation to achieve sub-research objective 12. In alignment with the systems thinking approach this process will bring about understanding by building up rather than breaking down, to ascertain the degree to which the strategy formulation framework should be aligned to the VC decision criteria, as the ultimate goal is to develop successful strategies for the business as a whole, and not only strategies that obtain VC funding.

5.2 Funding SMEs

The purpose of this section is to explore the various funding sources available to SMEs.

The influence of financial resources has been highlighted as a major factor contributing to the survival, development and growth of successful SMEs (Cook, 2001) (Ou & Haynes, 2006). SMEs employ a number of financing methods, ranging from initially utilising internal resources from the founder and informal external sources from the founder's immediate network of family and friends, to accessing formal external sources, such as trade credit, angel investors, VC, banks, financial institutions and securities markets (Chittenden, et al., 1996).

In terms of SME financing, Berger and Udell (1998) proposed the financial growth cycle paradigm, which suggests that different financing strategies are required and employed at differing stages of an SME's lifecycle. They suggest that the characteristics associated with an

SME during their start-up phase, including informational opacity, lack of trading history and associated high risk of failure, discourage the availability of funding from external sources and that therefore SMEs tend to be limited to internal sources of funding.

Subsequently, once the SME has survived the initial stages, and has begun to establish a track record and validate market data and provide collateral, its creditworthiness improves, which may attract external funding from investors wishing to invest in the business, or formal institutions, such as banks, may be able to provide trade credit and loans. In the later stages of the growth cycle, as the business matures and becomes informationally transparent, the SME may moreover gain access to securitised debt and equity markets (Berger & Udell, 1998).

Illustrated below in Figure 34 are the external financing options associated with the various stages of development of an SME, as adapted from Meyer and Mathonet (2008) and Cui, et al., (2010).

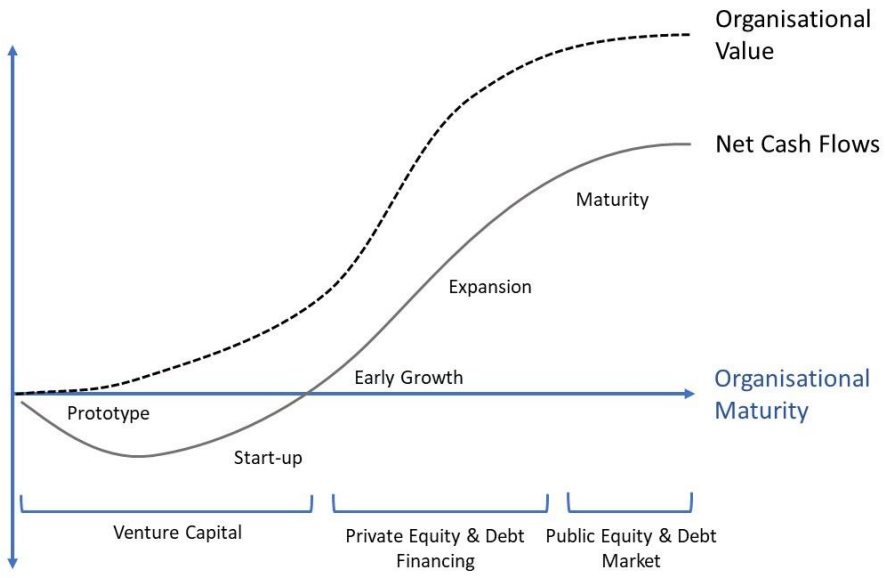


Figure 34 - J-Curve: The Business Cycle & Financial Demands Per Stage, adapted (Meyer & Mathonet, 2008) & (Cui, et al., 2010)

A number of empirical studies (Barton & Gordon, 1987) (Kimhi, 1997) have used the lifecycle model to review and understand the financing behaviour of SMEs. Studies in corroboration of the more recent findings of (La Rocca, et al., 2011) and (Wu, et al., 2008) found that the

financing behaviour of SMEs to a large extent adheres to the paradigm suggestions of the lifecycle model, both across time and across industry contexts.

However, other studies contend that the lifecycle model has shortcomings and that it does not provide a complete picture of SME financing behaviour. Berger and Udell (Berger & Udell, 1998) also conceded that their lifecycle model does not apply to all SMEs, regardless of age, size, as it is not perfectly correlated to the financing method. Similarly Gregory, et al., (2005) pointed out that financing options cannot be universally applied to all SMEs; however, as was the case with the growth stage states debate in Section 3.10, by relaxing the need to identify a specific sequence or financing option, it can be argued that a continuum exists in relation to firm size and age, and that this has significant predictive power regarding the funding options and financing behaviour of SMEs.

The lifecycle financing paradigm proposed by Berger and Udell (1998) is contrasted with the pecking order hypothesis developed by Myers (1984). The pecking order hypothesis suggests that the funding option of a firm is a function of firm size, and that internal funding sources are prioritised, with external funding sources only being utilised once internal sources are exhausted. Therefore, in order of preference, a firm will utilise internal equity before external debt, prefer short-term debt to long-term debt, and external debt to external equity. This equates to using internal equity before external debt and only then issuing external equity (Cassar & Holmes, 2003).

Consistent with the pecking order hypothesis and in contrast to the lifecycle funding paradigm Gregory, et al., (2005) argue that older firms should be less reliant on external sources of funding than younger firms, as they would have more retained earnings and internal funding available, accumulated during their lifetime. This view is corroborated by a study conducted by Sanchez-Vidal and Martín-Ugedo (2005) on Spanish SMEs.

However, a study by Helwege and Liang (1996), looking at a sample of small businesses between 1984 and 1992, found that the pecking order theory's sequence of funding did not hold. Their empirical findings revealed no significant relationship between a deficit in internal resources and an increase in external funding.

Despite the various efforts to develop a standardised theory related to the funding options available for SMEs, no such theory has been unanimously adopted. Nonetheless, the various theories do agree that an SME's characteristics and those of the founder do affect the financing behaviour of the firm. The following section will explore these characteristics in greater detail.

5.2.1 SME Characteristics

Research has revealed that a number of characteristics affect the funding behaviour of an SME. These characteristics include firm size and age, ownership type and legal form, geographical location, industry sector and asset base (i.e., ability to provide collateral).

5.2.1.1 Firm Size and Age

Although there is no agreed measure of firm size, the hypothesis that a firm's size affects the firm's activities and ability to grow is generally accepted (Gilbert, et al., 2006). Similarly, there is agreement that a firm's size is coupled to its age, and that firm size and age influence a firm's life cycle, especially as it pertains to financing decisions and which type of financing to employ.

Cassar (Cassar, 2004) in a study of 292 Australian firms found that an increase in size of SMEs is strongly correlated to the use of long-term debt and external financing. These findings support those of Storey (1994) that founders of SMEs initially (i.e., when the SME was smaller and younger) tend to rely on personal (internal) financing rather than external sources of funding.

Similarly, Petersen and Rajan (1994) found that, as firms grow, they engage with more funding institutions rather than relying on a single bank or credit provider. Berger and Udell (1998) argue that this may be due to information opacity and the lack of a track record of younger firms, in comparison to their larger, older counterparts.

More recently, Klapper, et al., (2002) found that firms younger than 4 years are more reliant on informal financing. This was supported by (1) Quartey (2003) and (2) Fatoki, et al., (2011)

who respectively concluded that there is a significant and positive relationship between firm age and the ability to obtain external financing (1) and debt (2).

5.2.1.2 Ownership Type and Legal Form

There seems to be a significant relationship between ability to utilise external financing and the legal form of a firm (Coleman & Cohn, 2000). This hypothesis is supported by Abor (2008) who too found that the legal structure of a business has a significant influence upon SMEs' financing decisions.

Both Coleman and Cohn (2002) and Abor (2008) corroborate the findings of Van Auken and Neeley (1996) who concluded that sole proprietorships face greater constraints than firms not incorporated as sole proprietorships, when it comes to raising start-up capital, and thus have to rely on alternative funding mechanisms. Petty and Bygrave (1993)and Hutchinson (1999) propose that the reason for the unwillingness of financing institutions to fund sole proprietorships is due to the concentration of ownership and control in one single person. The resulting information asymmetry between owner and funder in a sole proprietorship allows the owner to make all decisions, which means that s/he has limited financial reporting duties.

Cassar (2004) concluded that a firm's form of incorporation is perceived by funding institutions as a proxy for formality, professionalism and credibility. Consequently, there is a significant positive relationship between a form of incorporation that separates control and ownership, and demands a higher duty of care towards shareholders, with increasing reporting standards and receiving external financing (Cassar, 2004) (Storey, 1994).

5.2.1.3 Location

Location has also been found to influence an SME's ability to raise external capital. For instance, SMEs that are not located in major cities find it more difficult to obtain funding from formal institutions than their counterparts that are based in major cities in close proximity to financial institutions (Abor, 2008).

Fatoki and Asah (2011) argue that this may be due to the inability of SMEs to build a relationship with these financial institutions due to the geographical distance. This hypothesis is supported by Ono and Uesugi (2009) in their study of Japanese firms who found that there is a positive relationship between the ability to raise debt funding and the strength of the borrower-lender relationship.

5.2.1.4 Industry Sector

Numerous studies (MacKay & Phillops, 2005) (Michaelas, et al., 1999) have concluded that industry sector and associated capital structure (i.e., an asset base that is required to deliver the goods or service) also influence the financial needs and therefore the financing decisions of SMEs. For instance, Abor (2007) concluded that wholesale and retail industries relied more on trade credit and short-term debt, whereas the manufacturing, construction, hotel and mining industries utilised long-term finance rather than short-term debt.

5.2.1.5 Asset Structure

The observation above can in part be explained by the capital structure imposed by the industry sector and the subsequent ability to provide collateral. Bradely, et al., (1984) concluded that the ability to obtain debt funding is significantly and positively associated with the amount of unencumbered tangible assets of the firm.

In a more recent study, Odit and Gobardhun (2011) concluded that access to debt funding is dependent upon the debt ratio and asset structure of the SME. Additionally, they found that, the lower the portion of tangible assets to total assets is, the more difficult it is for SMEs to raise external funding because they cannot provide collateral.

5.2.2 Owner Characteristics

The characteristics of the owner manager have a significant influence on the financial behaviour of SMEs and their ability to access and utilise external financing (Cassar, 2004) (Irwin & Scott, 2010). Authors propose that this is due to the role of the owner manager as primary decision maker, and his/her significant influence on the financial decisions and

subsequently the performance and growth of the firm (Berggren, et al., 2000) (Coleman, 2007) (Vos, et al., 2007).

5.2.2.1 Gender

A number of authors (Carter & Rosa, 1998) (Verheul & Thurik, 2001) have concluded that male and female entrepreneurs differ in their financial decision making, and that this is specifically true in the start-up phase of the firm.

Verheul and Thurik (2001) and more recently Badulescu (2011) found that female entrepreneurs have less start-up capital available, that they start their businesses with significantly less capital than their male counterparts, and that they face greater credibility issues when interacting with formal financing institutions.

These findings are corroborated by the studies of Mijid (2009) , who found that female entrepreneurs experienced higher loan denial rates, and Coleman (2007), who provided evidence of credit discrimination against female business owners, as these were charged on average higher interest rates and had to provide higher levels of collateral.

Proposed reasons for this can be categorised into discrimination, abilities, preference and competition (Harrison & Mason, 2007) . Verheul and Thurik (2001) proposed that the reasons can be divided into direct factors, such as discrimination of women, and indirect factors, such as the female entrepreneur's choice of incorporation, management and expertise.

5.2.2.2 Age

In addition to gender, studies have found that the age of the entrepreneur also influences funding choices and behaviour. Romano, et al., (2001) found that older entrepreneurs are less likely to invest additional capital beyond the start-up phase into their ventures in comparison to younger entrepreneurs. This finding corroborates that of Van der Wijst (1989) who suggested that older entrepreneurs are less likely to accept external ownership of their firm. More recently, Vos, et al.,(2007) found that younger entrepreneurs were more likely to use

bank overdrafts and loans, credit cards, own savings, and family sources for funding, in comparison to older entrepreneurs who favoured using retained profits.

The reasons for these observations are explained by Briozzo and Vigier (2009, p. 37) who stated:

> "*As the firm and its owner grow older, information asymmetries decrease, granting easier access to debt (a supply-side effect), while the owner's risk aversion and personal costs of bankruptcy increase with age, and thus he or she desires to use less leverage (demand side effect)".*

5.2.2.3 Education and Experience

Coleman (2007) found that education is used by financiers as a proxy for credibility, and that a significant and positive relationship exists between the level of education of the entrepreneur and his/her ability to raise external financing. Coleman's (2007) findings support those of Storey (1994) who similarly found that entrepreneurs with a higher level of education were more confident in their engagement with external financiers and were thus more successful in gaining access to finance.

Similarly, the number of years the entrepreneur has worked within an industry sector, which relates to experience, is positively correlated with ability to raise debt financing (Coel, 1998). More recently, Nofsinger and Wang (2011) proposed that industry experience is the single biggest factor influencing the ability to raise external finance due to the information at the disposal of the entrepreneur. Similarly, Gompers, et al., (2010) found that experience is a significant decision criterion for credit providers in assessing the creditworthiness of the entrepreneur.

5.3 Sources of SME Financing

The purpose of this section is to review the source and characteristics of financing options available to SMEs.

5.3.1 Equity Financing

Evidence suggests that, due to information opacity i.e. a lack of transparent operational and financial data and moral hazards i.e. the risk that the SME may have provided misleading operational and financial data and not entered into a financing contract in good faith , in the seed, start-up and initial stages of an SME's lifecycle, SMEs tend to favour or to be constrained to using internal equity and financing sources associated with the owner manager's personal savings (Abdulsaleh & Worthington, 2013). Should SMEs survive the initial stages and gain a track record, owners and founders predominantly wish to reduce the financial dependence of the SME on their internal resources and are thus likely to pursue and utilise alternative external funding sources in order to support their growth.

According to Ou and Haynes (2006, p. 156) "equity capital is that capital invested in the firm without a specific repayment date, where the supplier of the equity capital is effectively investing in the business". Equity capital can come from either internal or external sources. Internal equity capital includes funds provided by the current owner-manager(s) and their family and friends, or from the retained profits generated by the firm. Alternatively, external equity is supplied by external 'independent' parties not immediately associated with current owner-manager(s) and their relatives (Ou & Haynes, 2006).

Given the characteristic shortage of cash and limited cash generating ability within the initial stages of the SME's lifecycle, SMEs consequently find it difficult to secure loans and provide the necessary collateral to satisfy debt financiers. The subsequent use of equity financing has two advantages (Ou & Haynes, 2006). Firstly, unlike debt, equity financing is long-term and does not 'legislate' short-term cash outflow in the form of interest payments. Secondly, successfully raising external capital acts as a proxy for credibility due to the approval of sophisticated investment professionals or firms.

According to Ou and Haynes (2006), SMEs turn to external equity financing to support their expansion needs in two instances: firstly, when the SME faces financial distress and a lack of alternative internal equity or external debt funding sources, and secondly, when expansion demands more cash outflows than there are cash inflows being generated from current

operations. Ou and Haynes (2006) argue that the reasons for this tendency are due to the risk of the venture and the reluctance of debt financiers to support uncertain growth prospects. This sentiment was supported by Schäfer, et al., (2004) who found that German SMEs received equity financing rather than debt within their initial stages.

An important consideration regarding external equity financing is that of the owner-manager(s)'s attitude towards and fear of growth and external funding. SME owner-manager(s) may choose not to grow so that they do not need to use external equity financing, citing the undesirable consequences of the business losing its "informal and family-like character", or losing ownership control of the business, and a decreasing work-life balance (Wiklund, et al., 2009). However, as stated in Chapter 3, evidence suggests that growth, and the use of external funds to achieve growth, are positively associated with survival and SME success (Berger & Udell, 1998). Recognising the importance of non-growing smaller firms and respecting the motivations and aversion to growth by certain owners and managers, this dissertation will focus on SMEs wishing to achieve growth. In the two sections below, angel investors and VC are discussed.

5.3.1.1 Angel Investors

Unlike other sources of external financing, angel finance is not intermediated, but rather is an informal market for direct finance (Berger & Udell, 1998). Angel investors are often high net worth individuals with the necessary business experience to gauge the growth potential of the SME within their industry sector, even without any previous direct connection or relationship to the owner-manager(s).

This form of investment is usually via the purchase of common stock in the hope of earning significant returns commensurate to the risk taken. Although the angel investors may be individuals, they may also form a small investment group, yet elect to hold their shares directly rather than doing so through another vehicle or scheme of arrangement.

According to Harrison and Mason (1992), angel financing is an appropriate form of financing for SMEs due to three reasons. Firstly, angel investors are more actively involved and

attracted to the initial stages of an SME's lifecycle, and therefore play an important role in bridging the financing gap between the internal resources of the owner-manager(s) and the formal external financing channels. Secondly, angel investors understand the risk and difficulty associated with the initial stages of an SME, and therefore tend to be long-term and more obliging investors. Thirdly, angel investors, unlike venture capitalists, usually invest in local firms operating in their immediate economy, which is a characteristic of most SMEs.

Angel investors are viewed as crucial to SME development. Morrisette (2007) cites the finding of a global study that angel investors invest 11 times the amount of capital provided by venture capitalists. Similarly, a review by Shane (2012) of data from different studies conducted between 2001 and 2003 revealed that between 140,000 and 260,000 angel investors invested between US$12.6 and US$26 billion into 50,000 to 70,000 SMEs each year. In Germany alone, a study by Stedler and Peters (2003) revealed the capital assets of the average angel investor ranged from €2.5million to €5 million invested in up to 5 SMEs, with each investment being within the start-up phase.

The involvement of angel investors in the SME ranges from inactive to participative. Barry's (1994) study found that most angels were not active investors, whereas Landstrom (1993) found evidence to the contrary. Mason and Harrison (1996) concluded that the benefits beyond the financial assistance of angel investors included assistance with operations and management, finance and accounting, strategic advice, and administration, as well as access to networks and marketing.

Due to their sheer number, and based on the results from qualitative studies, angel investors dominate VC financing in terms of both the number of SMEs utilising angel financing and the amount of capital deployed by angel financiers (Fairchild, 2011). However, angel financing has two dominant shortfalls (Wall, 2007). Firstly, angel investors typically do not have the financial resources to provide further financing beyond the start-up phase of an SME for it to become a dominant market competitor. Secondly, angel investors often have neither the necessary skills nor the interest to invest and support the SME once it has gained access to external financing. Angel investors thus tend to pass on the baton to the VC industry in order for the SME to continue the race to growth and success.

With the study interested in the long term survival and growth of SMEs, the limitations of angel investors disqualifies them as appropriate financing option against which to align the solution objective of this study.

5.3.1.2 Venture Capital

Venture capitalists act as financial intermediaries by pooling investors' capital to form funds and deploying these funds as investments into young start-up firms (Potter & Porto, 2007). Venture capitalists are given specific investment mandates, as agreed upon with the fund's investors, and subsequently have the power to decide the timing and type of investment along with the responsibility to screen, contract and monitor the investment post funding (Gorman & Sahlman, 1989).

Venture capitalists have peculiar characteristics when compared to other forms of financing because they are paid for their services; this typically includes a continual management component and a profit sharing component based on performance. Should the size of the investment have a sufficiently large incentive for the venture capitalist, he/she will expend considerable effort in improving the investment's growth prospects. Therefore, venture capitalists often actively participate in strategic planning, decision making, networking and marketing (Bygrave & Timmons, 1992).

As discussed, VC investments are characterised by a degree of risk and uncertainty due to a lack of information or information asymmetry, which in turn brings about issues such as moral hazard and agency problems (Berger & Udell, 1998). To address or alleviate these issues, venture capitalists primarily deploy three differing forms of investment mechanisms, namely, convertible securities, syndicating the investment between a number of funds, and provide the capital infusions in stages as objectives are achieved (Berger & Udell, 1998). The goal of these investment mechanisms is to reduce the exposure to asymmetric information and associated risk.

According to Cumming (2006), most venture capitalists favour convertible securities, which are initially in the form of debt but can be converted to equity at the election of the investor,

at a set price. Convertible securities address or alleviate the agency problem because the owner-manager(s) retains control of the business for the duration of the (Bascha & Waltz, 2001). As it is primarily a form of debt, the investor can recover some or all of his investment if the venture is unsuccessful. As the convertible security being a function of price, the risk shifts to the owner-manager(s) by incentivising these to achieve growth and to forfeit as little as possible upon conversion (Bascha & Waltz, 2001).

Syndication is another common investment strategy among venture capitalists and refers to two or more independent venture capitalists and funds sharing an investment. By reducing the size of the relative investment to each financier, risk in the case of failure is reduced (Cumming, 2006). Syndication can reduce the problems of information asymmetry and selection i.e. the availability of funding limiting the number of investments a fund can make and the risk that the choice of investment is wrong , in addition to reducing opportunistic behaviour on the part of the entrepreneur, i.e., dismissing the opinions and wishes of other parties due to the entrepreneur's dominant representation (Cumming, 2006).

Finally, a strategy favoured by venture capitalists and SMEs is that of staged financing. As the term suggests, venture capitalists invest funds as and when needed to limit their exposure, should the venture be unsuccessful, and to retain control. Staged financing allows the VC to gather more information as the SME develops, before making further funding decisions; this allows the VC to abandon the venture, should negative information be revealed (Kortum & Lerner, 2000). Staged funding further reduces the number of missed opportunities, as the VC can fund more ventures and only invest more in those ventures that are likely to be successful. Staged financing also solves the problem cited by owner-manager(s) regarding inflexibility, having to stick to one form of investment instrument i.e. equity versus debt and to a single funder, allowing SMEs to raise alternative funding later in its lifecycle, should such funding be available (Kortum & Lerner, 2000).

The section above proposes that due to the risk associated with start-up firms and the incentive for venture capitalists to choose and develop successful SMEs, their hands-on approach and access to resources not only helps to bridge the gap between informal funding and formal capital markets, but also addresses many of the inherent shortcomings of SMEs.

Additionally, venture capitalists provide flexible funding mechanisms that allow owner-manager(s) to retain a healthy level of control and also to access other forms of funding, whilst equally protecting venture capitalists from information asymmetry, moral hazard and agency problems.

5.3.2 Debt Financing

Unlike their larger counterparts, SME are exposed to higher levels of information opacity and therefore their choice of funding via debt or equity is limited (Berger & Udell, 1998). SME owners cite the dominant problem with issuing equity, namely, the associated dilution in ownership and control. Therefore, many owner-manager(s) would prefer to use debt as a source of financing rather than accessing external equity. The literature (Wu, et al., 2008) reveals three primary differences between SMEs and larger firms in relation to their ability to raise debt financing.

Firstly, SMEs, unlike their larger counterparts, are limited to the range of debt financiers they can access for funding. SMEs seem to be more reliant on commercial lenders, specifically institutional lenders, who primarily provide short-term debt in comparison to long dated bonds, which can be issued by larger firms.

Secondly, information asymmetry and opacity are more prevalent in SMEs; therefore, in order to obtain debt funding, it is necessary for SMEs to build long-term lasting relationships with debt funders and it is often necessary for owner-manager(s) to provide personal collateral in order to address any agency problems.

Finally, due to the concentration of owner-manager(s) in SMEs' agency costs, which are increased interest rates required by lenders to compensate them for risk associated with a conflict of interest, means that debt funding may not be cheaper than equity funding, as initially suggested by pecking order theory.

Choosing between short- and long-term debt is a difficult and important decision for SMEs, with owner-manager(s) having to weigh up the benefits and disadvantages of its use (García-Teruel & Martínez-Solano, 2007). Jun and Jen (2003) proposed that the advantages of short-

term debt include: (1) low or even zero interest rates, such as the case of trade credit, (2) lower nominal interest rates in comparison to long-term loans, (3) short-term debt can be more easily adapted in accordance with the SMEs' financial needs, i.e., converted to long-term, and (4) lower refinancing costs in comparison to long-term debt.

Additionally, from the financier's point of view, short-term debt addresses some of the issues associated with information asymmetry, as the debt has to be paid back over a shorter period. Two dominant disadvantages of short-term debt for SMEs is the higher level of risk, and having to make significant proportional repayments in the short term, rather than smaller repayments over a longer period (Jun & Jen, 2003). Therefore, SMEs may favour long-term debt over their short-term counterpart, should they perceive the benefits to fall short of the risk associated with the form of financing (García-Teruel & Martínez-Solano, 2007).

5.3.2.1 Trade Credit

Trade credit is an important source of financing for SMEs and, according to Berger and Udell (1998), an estimated third of SME debt was represented by trade credit in the USA in 1998. Trade credit is a contractual delay in payment for goods or services after they have been provided by a supplier; it represents a liability (accounts payable) on the balance sheet of the receiver and an asset (accounts receivable) for the supplier (García-Teruel & Martínez-Solano, 2010). The rationale for the use of trade credit by both the supplier and the buyer is attributed to transactive motive and financing motive (Fatoki & Odeyemi, 2010).

Transactive motive is the desire of a firm to transact in a manner that allows them to improve and leverage their balance sheet to do more transactions. For the supplier of trade credit, selling a good or a service allows them to convert the lower inventory amount on their balance sheet to a higher sales value, as goods receivable against which they can conduct further transactions. Similarly, for the buyer of goods or services on trade credit, they can retain cash, against which they can conclude further transactions.

Financing motive refers to the SME's desire to use trade credit when other sources of financing are not available or are more expensive. Effectively, the supplier of trade credit acts

as a financial intermediary, as they can access the credit market to finance their cash flow cycle (García-Teruel & Martínez-Solano, 2010). Fatoki and Odeyemi (2010) argued that SMEs favour trade credit if their own risk of default is too high with limited recourse from the supplier of the trade credit versus the personal collateral often required by debt financiers.

According to Cook (2001), trade credit can alleviate capital market inefficiencies in two ways. Firstly, trade credit suppliers require greater levels of information about their customers and, through the process of obtaining this information for their supplier, SMEs can address some of their own internal information opacity shortfalls. Secondly, utilising trade credit can act as a proxy for creditworthiness for institutional debt financiers willing to provide debt financing based on this signal.

Wilson and Summers (2002) however argue that trade credit can be costly, should the buyer be unable to make payment within the specified period according to the trade credit agreement. Nevertheless, Berger and Udell (2006) propose that the benefits of trade credit outweigh the drawbacks, and therefore the financing form remains critical for SMEs. Furthermore, Berger and Udell (2006) suggest that trade credit can act as a much-needed cushion during credit crunches, periods of monetary policy contractions and other shocks, which make the funding of SMEs undesirable.

5.3.2.2 Non-Bank Financial Institutions Debt

Financial institutions have differing lending policies to banks due to the differing regulatory environment within which they operate (Berger & Udell, 1998). Non-bank financial institutions who may provide debt include credit unions, pension funds, financing houses, and insurance companies. According to Atieno (2001), non-bank financial institution debt may suit SMEs due to their reduced procedural burden, flexibility and longer maturity periods.

According to Johnson (Johnson, 1997), the ability of non-bank financial institutions to provide debt is due to their balance sheet structure in comparison to banks. Banks tend to provide shorter term loans, as their liabilities are also shorter term. Non-financial institutions such as

insurance companies and pension funds, however, have longer term liabilities and thus their loan maturities are longer.

The arguments for and against the use of non-bank financial institution debt by SMEs include tax shield benefits and the retention of control making the argument in favour of non-bank debt whereas SMEs are against non-bank institutional debt due to the agency fees and significant recourse upon default of payment terms (Atieno, 2001).

5.3.2.3 Bank Financing

The role of bank financing as external funds for SMEs is well documented (Wu, et al., 2008). The arguments in favour of bank financing are that bank financing is fair due to the competition among banks, and that bank financing produces superior returns due to more efficient application of financing due to the monitoring and reporting requirements of banks (Wu, et al., 2008).

From the bank's perspective, SME financing is an important profit contributor, not only due to the interest charged on loans, but due to the introductory role of lending and the ability of the banks to provide additional services to SMEs to which they provide funding (De la Torre, et al., 2009). In fact, these additional services may sometimes be a requirement of the credit application, i.e., the SME is required to switch the business accounts to the bank for monitoring purposes (De la Torre, et al., 2009).

The literature suggests that successful lending by SMEs from banks is attributed to three dominant mechanisms that are developed and adopted by banks, including relationship lending (Berger and Udell, 1998), factoring (Soufani, 2002) and scoring (Frame, et al., 2001):

1. Relationship lending is based on the strength of the relationship between the bank and the SME. Berger and Udell (1998), for instance, found a significant positive relationship between successful credit applications and the duration and depth (number of previous transactions etc.) of the relationship between the owner-manager and the bank in question.

2. Factoring as a means of financing entails the bank 'buying' the SME's accounts receivable, acting as the necessary collateral, at a discount, in exchange for funding. The bank then assumes the responsibility of collecting the necessary payments, although the SME is ultimately responsible in the case of non-payment (Soufani, 2002). The discount paid versus the payment collected replaces the 'interest' component of the funding provided.
3. Credit scoring is a method employed by banks in order to address information opacity, should a bank not have an existing relationship with an SME. The bank reviews the financial position of the SME and gathers information from consumer credit bureaus and commercial credit bureaus (Frame, et al., 2001).

The unwillingness of SMEs to borrow from banks is attributed to three dominant factors, namely: (1) the short-term nature of the financing and proportional interest payments, accompanied by uncertainty regarding cash availability during this period (García-Teruel & Martínez-Solano, 2007), (2) the constraints that may be placed on the business and that may inhibit the SME's flexibility, as banks may limit further funding or may place covenants on the SME's balance sheet, and finally (3) the necessity for collateral from the business or in the form of personal assets (García-Teruel & Martínez-Solano, 2007).

5.3.3 Government Assistance

The role of SMEs in economic development is recognised in both developed and developing economies (Davidsson, et al., 2010). Consequently, governments have realised that SME development is constrained by access to finance, which in turn may hinder national development goals. In order to support SME development, many governments have thus instituted programmes to help SMEs gain access to finance, by providing loans, credit guarantees, invoice factoring and/or subsidies.

The dominant arguments provided in support of government instituted SME financing schemes include (1) credit market failure, (2) price distortions, and (3) dynamic externalities (Bechri, et al., 2001). Unfortunately, government-led direct interventions may have negative consequences, such has hampering developed industries that support a large part of the

economy. Therefore, some argue that indirect initiatives, such as tax legislation for instance, may be more suitable. According to Mensah (Mensah, 2004), SME financing schemes should meet two criteria, namely: (1) helping SMEs to meet their financings needs and (2) being sustainable.

5.3.3.1 Sub-Research Question

Reviewing the section above allows this dissertation to answer the sub-research question and achieve the associated sub-research objective, as set out in Table 28 below.

Table 28 - SRQ9 and SRO9

CODE	Research Question	CODE	Objective/Solution
SRQ9	What is VC?	SRO9	Introduce and define the purpose of VC.

VC as a subset of private equity investments provides financing to businesses that are subject to a higher degree of uncertainty and risk. SMEs, with their structural characteristics of being riskier, lacking collateral and needing flexibility, make alternative forms of funding sub-optimal. Accordingly, venture capitalists with their alignment in performance and value add contributions are a suitable and more optimal fit for SMEs wishing to achieve growth.

5.4 Venture Capital and SMEs

The purpose of this section is to review the process, decision criteria and characteristic benefits associated with venture capital.

According to Dickinson (2007), private equity and VC as a subset of private equity fill a critical financing gap between the entrepreneur and his immediate network funding his business on the one hand, and conventional funding sources such as banks and capital markets on the other. Given their alignment with the performance of the investee company, private equity investors contribute more than just financial resources; they also contribute business

expertise, training, and networks, which improves the chances of their investee company's survival and success (Snyman, 2012).

5.4.1 Venture Capital Process

The VC investment process is part of the VC cycle and has not changed significantly since the first academic studies on VC were conducted in the 1970s (Kollman & Kuckertz, 2010). The VC cycle begins with the VC raising the necessary funds ('fundraising'), investing the funds via the investing process ('deal origination, screening, evaluation and structuring'), managing the investment once it has been made ('monitoring, control and value adding'), and finally realising any profits from selling off their stake ('exit') (Kollman & Kuckertz, 2010). In order for the VC to exit the investment, a suitable buyer for the business is needed. The main exit strategies include a private sale, or offering the shares to the public or to institutional investors via an Initial Public Offering (IPO). Upon exit, the value of the business is determined by gauging the future income streams that could be derived from the business. The business would therefore have had to build or acquire the necessary resources to be able to convince the new investors of the business's ability to create future income streams and hence generate wealth.

In order to compensate venture capitalists for the level or risk associated with the investment, venture capitalists are said to seek innovative disruptive ideas, where a company that has successfully commercialised its innovation is able to derive significant monopoly profits. The risks associated with a growing venture change as it develops, with the initial risk being that of whether the product or service will be adopted, which then changes to whether the business is scalable, to finally whether the resource base can be used to exploit new opportunities.

Figure 35 below illustrates the common investor assessment stages found in VC financing. As illustrated, the proposed business venture is initially evaluated based on more tangible, objective criteria related to the market opportunity and whether the business's intended value offering would satisfy the proposed market need. Thereafter, the review process shifts towards less tangible, subjective criteria related to the team being able to deliver according

to expectations. During the final stages, focus shifts towards the entrepreneur as the leader and their social skills, including expectation and impression management, persuasiveness, ability to think on their feet and answer question as well as give and receive advice over measurable factors.

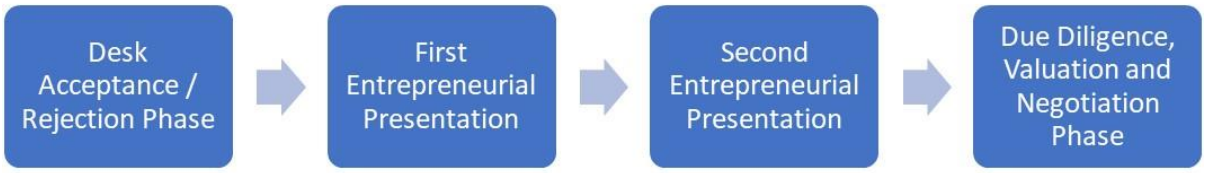


Figure 35 - Common Investor Assessment Stages (Brusha, et al., 2012)

5.4.2 Venture Capital Decision Criteria

Each year, thousands of entrepreneurs and companies submit their proposals to venture capitalists in the hope of gaining access to the VC's financial and non-financial resources to realise their commercial and financial dreams. However, only a small fraction succeeds in this endeavour and, not surprisingly, a large body of studies aims to understand the VC decision making process, as illustrated in Figure 35. Generally, the research reveals that venture capitalists favour characteristics related to (1) the management team, (2) the market potential, (3) the product or service, and (4) the financial potential in making their decisions.

Over the past 40 years, research has revealed repetitive specific preferences within each of these broad categories. Regarding the management team research indicates that VC's prefer team's with industry experience and mixed educational backgrounds (Dixon, 1991) (Franke, et al., 2008) (Goslin & Barge, 1986). Within the market potential category literature reveals that VC's favour markets of considerable size experiencing high growth rates, conditions that support market entry and revenue growth (Bachher & Guild, 1986) (Tyebjee & Bruno, 1981). With regard to the product or service venture capitalists evaluate the need for the product or service offering, innovativeness of the value offer i.e. the factor by how much the product or service offering is an improvement on what currently exists, the proposed competitive advantage and the ability to secure proprietary protection (Khan, 1987) (Wells, 1974). Finally, regarding the financial potential of the venture research reveals that venture capitalists

favour factors related to investment risks and returns and time to exit with VC's requiring 10 times return in a horizon of 5 to 7 years for the level of risk they assume by investing in the business.

Even though our understanding of VC decision criteria has progressed due to a number of studies in the field, these studies however have received some criticism, with academics questioning their validity due to the *post hoc* nature of the research methods (Petty & Gruber, 2011). These research methods typically rely on self-completed questionnaires or interviews, where the interviewee is asked to list and rank their decision criteria. The critique stems from the notion that the interviewee may suffer from cognitive and perceptual limitations, such as recall or *post hoc* rationalisation biases (Shepherd & Zacharakis, 1999). In addition, empirical results illustrate that venture capitalists have only a limited understanding of their own decision process. Consequently, interviewees report how they believe they decide, instead of how they actually reach decisions, by overstressing criteria that are ultimately irrelevant to day-to-day operations, which influence the profitability and probability of the survival of the business and criteria that they believe to be desirable.

Table 29 illustrates the dominant interview-based research methods employed to determine the VC decision criteria.

Table 29 - VC Decision Criteria Study Collection Methodology

Study	Collection Method	Deal Data	Sample (Location)	Research Focus
(Wells, 1974)	Interviews	Actual deals per firm (0 – 49)	7 VC firms/10 VCs (US)	VC activities and decision-making processes
(Benoit, 1975)	Survey, Interviews	130 actual deals	22 VCs (France)	Comparing US and French VC decision factors
(Hoban, 1976)	Archival analysis, questionnaires	50 actual deals	3 VC firms (US)	Identifying variables that predict venture success

Study	Collection Method	Deal Data	Sample (Location)	Research Focus
(Tyebjee & Bruno, 1984)	Telephone survey, questionnaires	Study II – 90 actual deals	Study I – 46 VCs (US), Study II – 41 VC firms (US)	Study I – VC evaluation process, Study II – Investment decision criteria
(Khan, 1986)	Questionnaire	104 actual deals	36 VC firms (US)	Entrepreneurial characteristics related to venture success
(MacMillan, et al., 1987)	Questionnaire	62 VCs – 2 actual ventures, 5 VCs – 5 actual ventures	67 VCs (US)	Classes of screening criteria, Classes of successful and unsuccessful ventures
(Robinson, 1987)	Mail survey	n/a	53 VC firms (US)	VC firm strategies and strategic assumptions
(Bygrave, 1988)	Venture economics	1501 actual deals	464 VC firms (US)	VC co-investment networks
(Rea, 1989)	Mail survey	89 actual deals	18 VCs (US)	Factors that affect VC entrepreneurial negotiations
(Histich & Jankowicz, 1990)	Interviews	30 actual deals	5 VCs (unknown)	The role of VC intuition in investment decision making
(Dixon, 1991)	Interviews	n/a	30 VCs (UK)	Factors considered when evaluating proposals
(Riquelme & Tickards, 1992)	Conjoint exp.	30 profiles, 10 profiles	Step I – 6 VCs (unknown), Step II – 7 VCs (unknown)	Applicability of conjoint measures, confirming and ranking of criteria

Study	Collection Method	Deal Data	Sample (Location)	Research Focus
				used to evaluate deals
(Hall, J. Hofer, C., 1993)	Interviews	16 (actual) protocols	4 VCs (US)	Investment decision criteria
(Muzyka, et al., 1996)	Interviews, questionnaire	n/a	73 VCs (EU)	VC decision criteria
(Shepherd, 1999)	Conjoint exp.	39 profiles	66 VCs (Australia)	VC assessment of new venture survival
(Sacharakis & Meyer, 2000)	Conjoint exp.	50 profiles	53 VCs (US)	VC decision aids and assessing venture success potential
(Zacharakis & Shepherd, 2001)	Conjoint exp.	50 profiles	53 VCs (US)	VC overconfidence
(Sheperd, et al., 2003)	Questionnaire	39 profiles	66 VCs (Australia)	VC experience and decision making
(Dimov, et al., 2007)	Venture Expert	n/a	108 VC firms (US)	VC firm characteristics and investment selection
(Franke, et al., 2008)	Conjoint exp.	20 profiles	51 VCs (Europe)	VC evaluation of start-up teams

In an attempt to address the shortcomings of these *post hoc* research methods, a limited number of studies have attempted to ascertain the true decision criteria by gathering data in real time via conjoint analysis methods (Petty & Gruber, 2011). Conjoint analysis was developed by Paul Green, a professor at the Wharton School of the University of Pennsylvania, and Data Chan (Petty & Gruber, 2011). Conjoint analysis aims to determine the most influential attributes by asking the respondent to rate, rank or choose an artefact created from a number of attributes. Each example of the artefact is similar enough to act as substitutes, yet sufficiently dissimilar for the respondent to have a preference. The studies concluded that venture capitalists favoured managerial and entrepreneurial experience and

the existence of a prototype. More recently, (Franke, et al., 2006) conducted a conjoint analysis on 51 venture capitalists and made the startling revelation that venture capitalists had a significant similarity bias, i.e., they favoured start-up teams with similar training and professional experience to the venture capitalists.

Yet even these attempts to address the shortcoming of *post hoc* research methods by collecting real time data while the decision was being made suffer from their own shortcomings. There are three main arguments questioning the validity of the outcomes, and each relates to the simplified decision task and context provided to the interviewee (Kollman & Kuckertz, 2010) . The first proclaims that the complex decision process is undermined by the limited number of decision variables proposed to the VC, thus drastically reducing its complexity. In addition, the decision of which criteria to present to the interviewee is subject to the researcher's own beliefs as to which decision criteria are the most relevant. The second argument questions the controlled decision-making environment, proclaiming that the study does not take context into account, such as the assessment stage of the valuation process, for instance. Thirdly, academics question the non-incentive nature of the decision environment, where there are no meaningful financial consequences. However, some authors contend that, by providing a controlled decision environment, the researcher's theoretical predictions can be tested if the decision environment is representative of the real-world scenario.

With the abundant decision criteria identified from empirical studies, research has had to focus on the most important ones. Accordingly, a 2010 study by Kollmann and Kuckertz set out to determine the most relevant decision criteria with the "explicit goal of achieving the greatest possible approximation to a complete catalogue of investment criteria" (Kollman & Kuckertz, 2010, p. 742). The study identified 14 decision criteria, only considering criteria proven to be relevant by at least two previous studies (see Table 30 below). venture capitalists agreed that, despite the reduced number of criteria, the catalogue was largely complete, and only opted to introduce the additional criterion of a 'pre-test' (Morris, et al., 2005): this gauges the entrepreneur's suitability for VC, as this subset of entrepreneurial finance requires

businesses with the motivation to innovate and pursue high levels of growth, unlike small mom-and-pop style businesses.

Table 30 - Research Revealed VC Decision Criteria

Factor	Investment Criteria	Description	Evidence of Criteria's relevance
Personality of entrepreneur	"VC character"	Motivation to pursue elevated levels of growth.	(Morris, et al., 2005)
	Leadership capabilities	Ability to effectively lead a team to achieve a desired goal.	(MacMillan, et al., 1985), (Robinson, 1987)
	Commitment	Demonstration of commitment to the venture and personal alignment with its success.	(Dixon, 1991), (Muzyka, et al., 1996)
Experience of entrepreneur	Track record	Demonstrated track record to achieve business success.	(Flynn, 1991)
	Technical qualification	A demonstrated or inferred (education validated) technical ability associated with the venture's technology.	(Shepherd, 1999),(Franke, et al., 2006)
	Business qualification	A demonstrated or inferred (education validated) business management ability associated with the venture.	(Shepherd, 1999), (Franke, et al., 2006)
Product or service	Innovativeness	A high degree of novelty associated with the product or service.	(MacMillan, et al., 1985), (Mason & Stark, 2002)
	Patentability	Ability to patent the technology or concept to limit competition.	(Tyebjee & Bruno, 1984), (MacMillan, et al., 1985)

Factor	Investment Criteria	Description	Evidence of Criteria's relevance
	Unique selling proposition	The product or service offering should be unique to similar offerings or substitute offerings.	(Mason & Stark, 2002)
Market characteristics	Market volume	The target market should be significant.	(Tyebjee & Bruno, 1984) (Mason & Stark, 2002)
	Market growth	The target market should be forecast to experience significant growth.	(Tyebjee & Bruno, 1984), (Mason & Stark, 2002)
	Market acceptance	Validation that the market is willing to adopt the product or service.	(Tyebjee & Bruno, 1984), (Mason & Stark, 2002)
Financial characteristics	Fit to investment strategy	The intended venture is aligned with the VC fund's investment strategy.	(Muzyka, et al., 1996), (Mason & Stark, 2002)
	Return on investment	The forecast return on investment exceeds the VC's return hurdle.	(Tyebjee & Bruno, 1984), (MacMillan, et al., 1985),
	Exit possibilities	There are valid prospects of crystallising the value of the investment.	(Muzyka, et al., 1996), (Mason & Stark, 2002)

Subsequent studies (Narayansamy, et al., 2012) (Šarić, 2017) (Visagie, 2011) have confirmed the completeness of the high-level decision criteria as proposed by Kollmann and Kuckertz (2010). However, various authors propose the explicit review of certain considerations, which fall within the categories. For example, Visagie (2011) included, as a separate item, the considerations of a 'scalable business model and commercial proof of concept', which Visagie admits falls within the market characteristics categorisation. Therefore, it is safe to assume that there will always be contention as to the decision criteria beyond the high-level categories.

Moreover, although there may be agreement on the broad decision categories and criteria, authors have found differing views regarding the order of importance of these criteria (Šarić, 2017). Šarić (2017, p. 475) concludes that there is no unambiguous answer as to what the key VC decision criteria are, but

> *"in order to increase the chances of attracting venture capital, entrepreneurs are supposed to be familiar with this form of financing, and should be investment ready. Entrepreneurs are investment ready if they are aware what conditions they have to meet."*

5.4.3 Research Sub-Question

Reviewing the section above allows this dissertation to answer the sub-research question and achieve the associated sub-research objective, as summarised in Table 31 below.

Table 31 - SRQ11 and SRO11

CODE	Research Question	CODE	Objective/Solution
SRQ11	What decision criteria influence VC decisions?	SRO11	Understand the decisions associated with awarding VC to new ventures and SMEs.

Although there may be disagreement as to the granular decision criteria, it would seem evident that practice and theory agree on the high-level decision criteria considered by

venture capitalists. Accordingly, with the objective of the dissertation being to provide a strategy formulation framework in alignment with the investment considerations of venture capitalists, the following requirement can be formulated:

- **R1** – The framework should communicate the VC decision criteria favoured by investors and the concept that venture capitalists prefer characteristics inversely associated with risk.

5.4.4 The Venture Capital Valuation Process

The difficulty for venture capitalists is the complication in the valuation process in an entity where the price is not defined by a market, but through the financial considerations, which play only a small part next to other considerations, such as the industry characteristics (structure, trends and markets) and the business's characteristics (development stage, competitiveness, etc.) (Miloud, et al., 2012).

Mainstream finance theory measures the economic value of any investment through the present value of future cash flow, which presents some difficulty when applied to businesses in the early stage of their development, as most information is not available to deliver on this calculation. This has often been a source of frustration between venture capitalists and the entrepreneur; however, an entrepreneur can set his business up in a way that would result in higher valuations by venture capitalists (Miloud, et al., 2012).

Research on VC valuation methods has highlighted the main three factors taken into consideration when determining the value of a business (Miloud, et al., 2012):

- **Top management and the entrepreneur** (arguably the most important): The business is valued significantly higher if top management has the relevant industry, managerial and start-up experience prior to playing a role in the current business. A good spread of skills in top management also reduces the key man dependency risk.
- **Differentiated industries**: Businesses, which operate in highly differentiated industries with positive industry growth, add to the pre-money valuation of a business.

- **Networks:** There exists a high correlation between the size of a network and the valuation made by the VC company. The role of alliances and innovation capabilities positively influence the performance of the business, as well as how it is perceived by the VC company. The quantity and quality of these networks are salient signals to the VC firm, which positively correlate to the speed and valuation of an IPO.

Reviewing the characteristics above, which are associated with higher valuations, it would seem evident that mainstream finance theory holds true. In other words, the characteristics above are associated with a reduced degree of novelty (ignorance or a lack of knowledge as the definition accepted by the liability of newness construct), i.e., they represent risk reduction mechanisms and are negatively correlated with business risk, which highlights a higher probability of success for the business.

This reduced level of uncertainty related to the future and hence the greater probability of success increases the value of the firm, because the discount rate as a proxy of risk applied to future cash flows, if it was applied, would be reduced, thus increasing the present value of these cash flows according to (Correia, et al., 2015, p. 8.4):

$$Present\ Value = \frac{C_1}{1+r} + \frac{C_2}{(1+r)^2} + \cdots + \frac{C_{n-1}}{(1+r)^{n-1}} + \frac{C_n}{(1+r)^n}$$

Where: C = Cash flow per period

r = discount rate

The probability of success is also increased by VC companies through their non-financial contributions to the businesses. However, these contributions are unlikely to be factored into the valuation of the SME, as these are unique to the VC provided and would only influence valuation considerations, if there was strong competition between competing investors.

5.4.5 The Non-Financial Venture Capital Contributions

Once the VC has selected a business as investment worthy, it will provide the business with the funding and coaching it deems necessary to develop its potential. VC companies that provide support for their investments see better performance and a more substantial return-on-investment (Dimov, Dino; Shepherd, Dean, 2005) (St-Pierre, et al., 2011).

VC companies' exposure to a large number of businesses builds the necessary experience, which results in an in-depth knowledge of the elements required at each stage of business development (St-Pierre, et al., 2011). This experience, together with their extensive network of contacts, is crucial when deciding on an investment and the appropriate resources and configuration needed to grow the business.

The non-financial contributions from VC companies are highlighted in Table 32 (St-Pierre, et al., 2011) (Miloud, et al., 2012)(Sudek, 2006)(Brusha, et al., 2012) (Witbank, et al., 2009).

Table 32 - The Non-Financial Contribution of VC Firms

Contribution	Explanation
Entrepreneur and top management	The VC company's role in coaching and obtaining buy-in from the entrepreneur and top management regarding the strategy and operation of the business.
Industry structure	The VC company's leverage off its current resources in order to test future products and services in the market, evaluate customer needs, understand possible untapped markets, and connections within the industry.
Organisational structure	A business' ability to innovate as well as the human resources management practices form an important part of the resource based view, which acknowledges the organisation's resources as important for its competitive advantage.
Innovation capability	VC companies facilitate the social ties with economic partners, which supports the collaborative innovation capabilities of an organisation. These ties lead to knowledge transfer, which reduces the product development period and time to market.
Human Resources Management (	The HRM practices and employee retention is reduced through the VC company's tacit knowledge (rewards systems, recruitment-, evaluation- and performance policies), which reduces HRM issues and thus increases the business' probability of success.

Contribution	Explanation
Networks	VC companies use their networking capabilities to draw on the collaborative resources and expertise of a network. The networking capability adds a level of legitimacy, which allows businesses to obtain resources that would have been otherwise unavailable.

The strategic readiness of the SME is one of the criteria assessed when it applies for financing. The preparedness of a business, its people, systems and structure to deliver on its strategy, is defined by the human, information and organisational capital coupled with the intangible assets that are the foundation for strategic change, which most often involves new markets, products or corporate transformation (Kaplan, R. S. and D.P. Norton, 2004).

5.4.6 Research Sub-Question

The findings from the above discussion allow this dissertation to answer the sub-research question and achieve the associated sub-research objective, set out in Table 33.

Table 33 - SRQ10 and SRO10

CODE	Research Question	CODE	Objective/Solution
SRQ10	How does VC affect new venture survival and SME growth?	SRO10	Understand the reason to support the use of VC.

With SMEs being characteristically associated with uncertainty and risk, and a lack of collateral or established clients, which are the requirements of traditional debt funding or trade credit, SMEs are particularly suited to VC financing, where investors are comfortable with the degree of risk. Not only can VC financing assist SMEs in acquiring certain resources, but their non-financial contributions may also assist in addressing and reducing certain risk factors, and in so doing improving their chances of survival and growth.

5.5 Requirement Consolidation

In accordance with the systems engineering method illustrated in Figure 36, this chapter has reviewed the domain of VC and how it relates to SME financing, survival and growth.

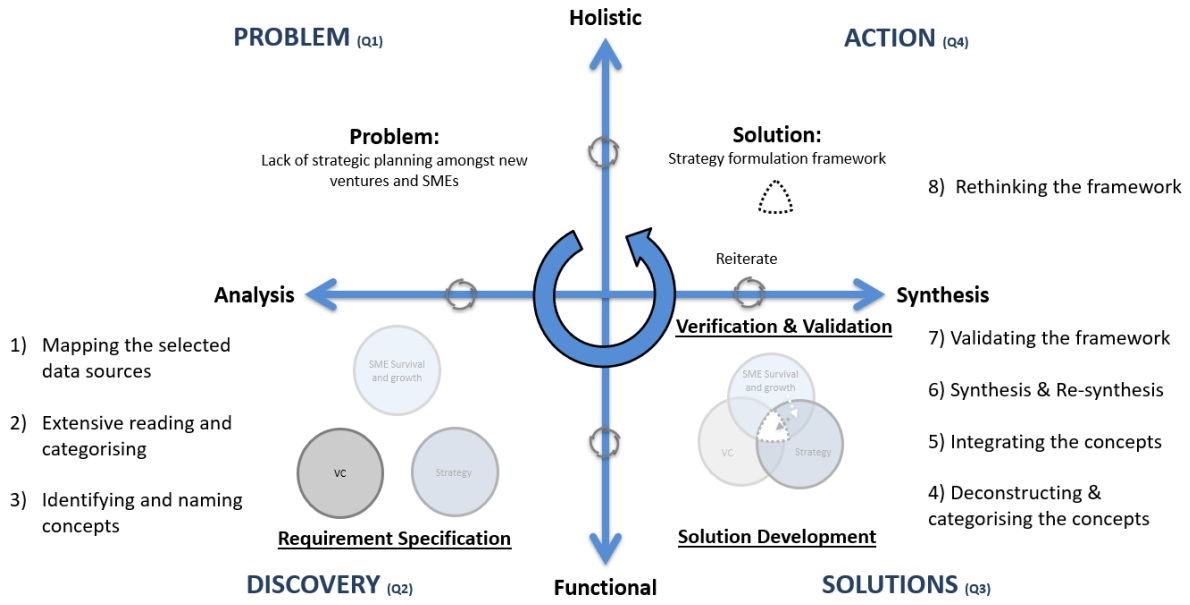


Figure 36 - Research Design and Venture Capital

This chapter did not reveal any overlapping requirements and therefore the following singular requirement from this chapter, as summarised in Table 34, will inform the ultimate solution.

Table 34 - Venture Capital Consolidated Requirement

New Requirement Identifier	Rationale
VC – 1	Related Original Requirements: R1 Unifying theme or construct: Risk **Requirement:** The framework should communicate the venture capital decision criteria favoured by investors and the concept that venture capitalists prefer characteristics inversely associated with risk. **Theoretical Foundation:** Venture Capital Decision Criteria (Section 5.4.2) **Motivation:** venture capitalists ascribe to mainstream finance theory in that survival and growth as well as value are inversely correlated to risk; in order to

New Requirement Identifier	Rationale
	obtain VC funding, SMEs have to satisfactorily demonstrate that the firm has these characteristics associated with each of the decision criteria.

5.6 Chapter Conclusion

In accordance with the research design, this chapter reviewed the various sources of funding available to SMEs and considered the suitability of VC to the development of SMEs in order to answer sub-research question (SRQ9 through SRQ11) and associated objectives (SRO9 through SRO11) as illustrated in Table 35.

Based on the analysis above, it can be concluded that VC as a subset of private equity financing continues to be regarded as an appropriate source of financing to support SME survival and growth, due to VC financiers being more amenable to the risk associated with SME ventures and not requiring the structural conformity of other forms of financing, i.e., collateral or long-standing clients and contracts. Additionally, unlike other forms of financing, VC financiers also contribute non-financial resources that support an SME's survival and growth.

VC financiers consider a number of decision criteria when assessing whether to invest in an SME or not. However, there remains a lack of agreement as to the specific criteria, beyond a high-level categorisation that is commonly used in the literature. The agreed upon underlying concept is that venture capitalists value characteristics, which are negatively correlated to risk and failure within each high-level categorisation. In order for SMEs to obtain funding, owner-managers thus need to be aware of the high-level decision criteria as well as the concept of risk, which underpins the VC decision making processes, and be able to demonstrate that the firm has the necessary characteristics.

In accordance with the methodology, the VC decision criteria and the concept of risk were captured in the associated requirement within this chapter and will inform the ultimate solution.

With the systems thinking approach utilising synthesis to develop understanding of the phenomenon under study, Chapter 6 will effect the third quadrant of the systems engineering method as illustrated in Figure 36 to review the alignment of the VC decision criteria with the requirements derived in Chapters 3 and 4 regarding the factors that influence SME survival and growth and successful strategy formulation, as the goal is not only to derive strategies that secure funding but strategies that result in success.

Table 35 - Sub-Research Question and Sub-Objective Completion

CODE	Research Question	CODE	Objective/Solution	Section(s) Answered /Achieved
SRQ9	What is VC?	SRO9	Introduce and define the purpose of VC.	5.3.3.1
SRQ10	How does VC affect new venture survival and SME growth?	SRO10	Understand the reason to support the use of VC.	5.4.6
SRQ11	What decision criteria influence VC decisions?	SRO11	Understand the decisions associated with awarding VC to new ventures and SMEs.	5.4.3

Part 3 – Solution Formulation and Validation

In accordance with the systems thinking approach and systems engineering methodology, the following part of the document will synthesise the framework from the requirements derived from theory and additional design considerations which take into account the intended solution space, before verifying that the framework addresses all the criteria and validate that the framework achieves its intended objective. For ease of reference the dissertations methodology and progress is presented in Figure 37 below.

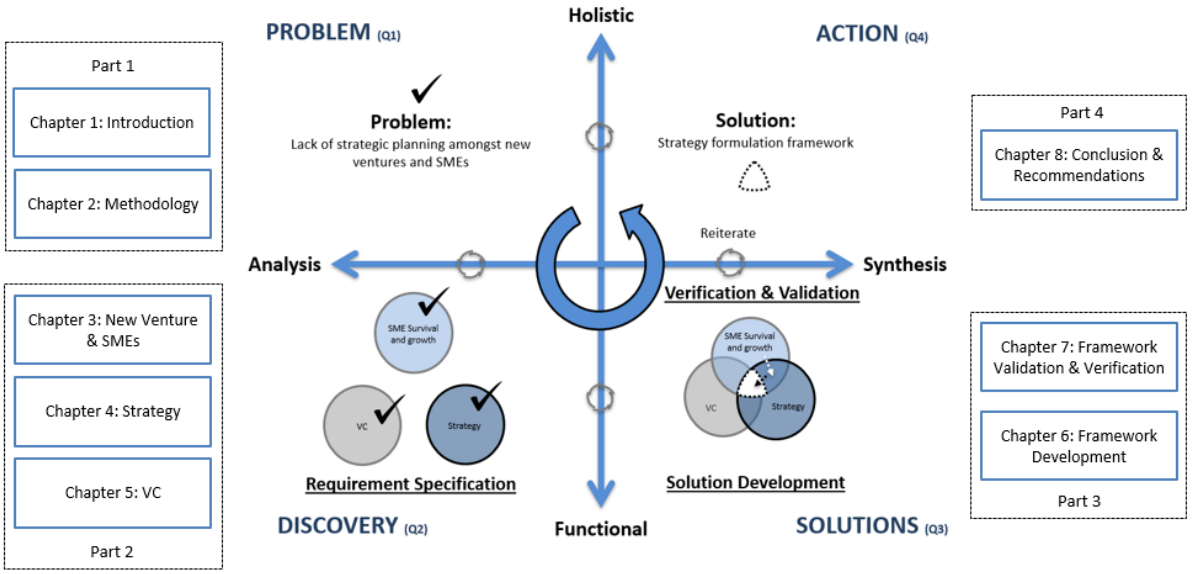


Figure 37 - Research Design, Progress & Document Layout

Chapter 6 – Framework Development

The purpose of this chapter is to realise the intent of the study, 'developing a conceptual framework' in support of the study's objective of deriving a practical tool to support strategy formulation in SMEs.

6.1 Introduction

In Chapter 1, the problem and subsequent need for a practical tool to support strategy formulation in SMEs was explained. This need for a practical tool guided the selection of the research methodology and research methods, as outlined in Chapter 2, to develop a conceptual framework as a written and visual product with explanatory powers (Miles & Huberman, 1994). Additionally, the methodology outlined how a conceptual framework is constructed from modules, factors, concepts and variables identified from previous inquiry. However, the interactions between these constructs have to be developed – they cannot be found ready-made, with understanding arising from the process of building up rather than breaking down, in accordance with the systems thinking approach. This informed the decision to employ the systems engineering method, which necessitates developing requirements from theory and subsequently identifying solutions and synthesising these solutions into a coherent framework.

With the various requirements having been derived in Chapters 3, 4 and 5, (second quadrant of the research method illustrated in Figure 38, this chapter effects the third quadrant of the

systems engineering method by utilising concept mapping as a method to develop frameworks (referred to as sub-frameworks going forward) of understanding at increasing levels of depth, before finally synthesising their theoretical implications to develop the final framework.

As discussed in Section 2.5, the framework development process requires the development and consideration of additional requirements and design considerations, informed by the literature review and the envisaged solution space, which may have implications and restrictions on the final framework i.e., being absolute or a guiding principle. Accordingly, additional requirements and design considerations were developed by considering key words, concepts and phrases from the literature and utilising the requirement categorisation, as proposed by Van Aken, et al., (2006) and used by Brockmoller (2008), Weber (2011), Krause and Schutte (2015) and Kennon (2017) as inspirational guide.

In accordance with the concept mapping method the framework development process initiates by considering the key words and concepts from literature, deriving additional design requirements and considerations, and subsequently categorising them. The subsequent concept mapping processes of drawing connections and creating sub-categories guides the framework development process as illustrated in Figure 38 (Synthesis element) below:

1. Firstly, the dissertation considers the functional requirements associated with SME survival and growth and develops an associated sub-framework;
2. Secondly, the dissertation reviews the functional requirements that influence successful strategy formation and formulation, and integrates these into the SME sub-framework;
3. Thirdly, the dissertation evaluates the alignment of the requirements and therefore the associated sub-frameworks of (1) and (2) above with the VC decision criteria; and
4. Finally, the dissertation expands upon the strategy formulation framework at increasing levels of detail by considering all of the requirements that affect the solution space.

The reason for excluding the additional non-functional design considerations, in the user requirements, boundary conditions and design restrictions from the framework development process, is because they are conceptual in nature and are applicable to the framework as a practical tool as a whole. However, these design considerations will not escape the verification against the framework, which will be done in Chapter 7 according to the systems engineering method.

The validation process to be reviewed in Chapter 7 revealed that the theoretical underpinnings of the sub-frameworks and thus of (1) the sub-frameworks and (2) the ultimate framework as the combination of the sub-frameworks were too technical and theoretical in nature to be directly applied in practice. The theory and sub-frameworks therefore had to be translated into practice before they could be utilised. The dissertation will therefore refer to the original sub-frameworks and the final framework that combines the sub-frameworks as the 'theoretical frameworks', with its translated counterpart being referred to as the 'practical framework'.

With understanding being derived from building up rather than breaking down the chapter answers the remaining sub-research question and achieves the final sub-research objective as derived in Section 1.5 associated with VC, as illustrated in Table 36 below for ease of reference, by reviewing the degree of alignment between VC decision criteria and the elements which impact upon SME survival and growth and successful strategy formation and formulation in SMEs.

Table 36 - SRQ12 and SRO12

CODE	Research Question	CODE	Objective/Solution
SRQ12	How are VC decision criteria aligned with the factors that influence SME survival and growth as well as successful strategies?	SRO12	Understand the alignment of VC decision criteria to the factors that influence SME survival and growth as well as successful strategies?

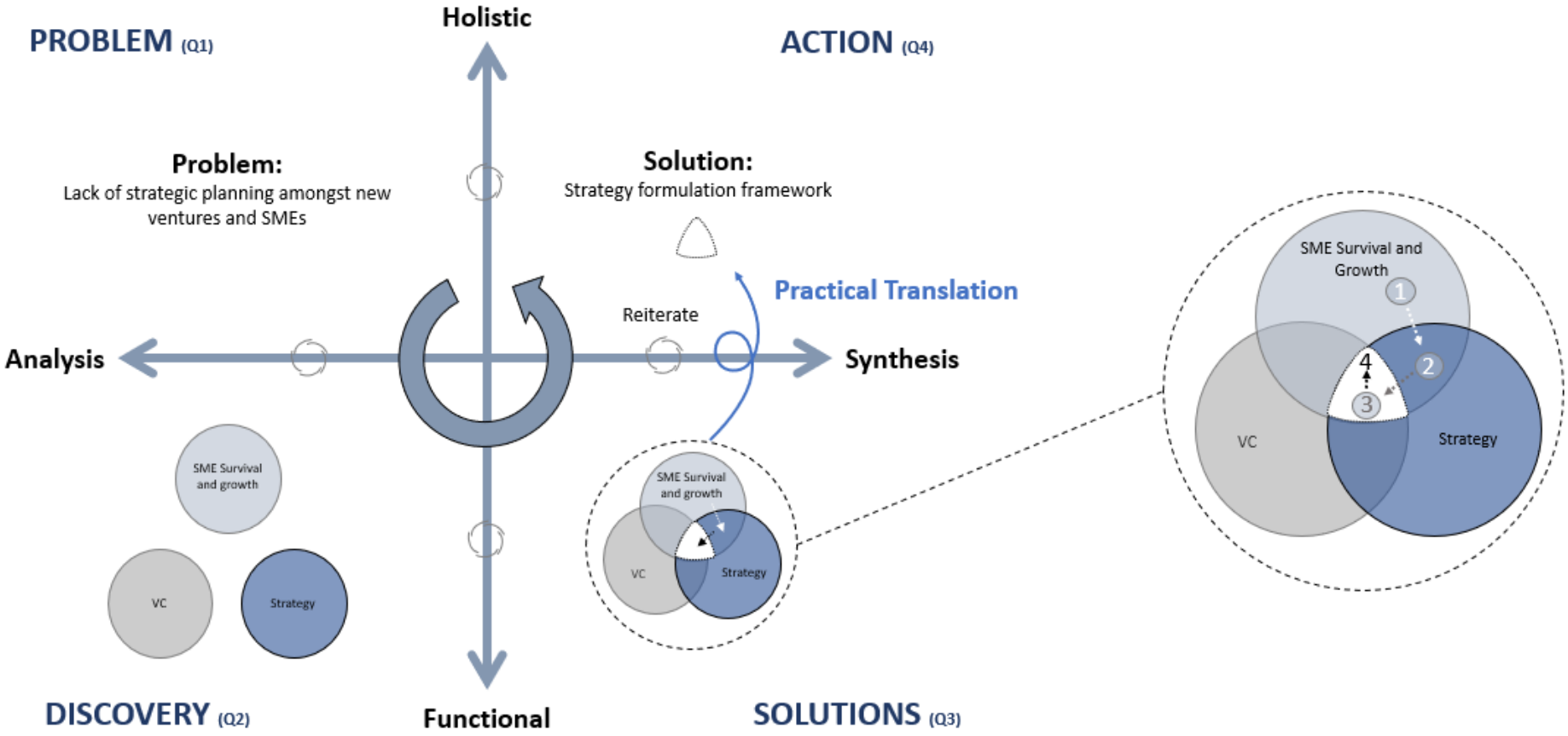


Figure 38 – Systems Engineering Method (Left) & Synthesis (Right)

6.2 Methodology

The purpose of this section is to revisit the criteria of a framework and the subsequent process that will guide its development.

6.2.1 Scope

Before the study can employ the framework development process outlined in the third quadrant of the systems engineering approach, as depicted in Figure 38 and discussed in Section 2.8.2, it is important to be cognisant of the criteria for this to qualify as a framework, as these characteristics will define the scope of the development process.

With the caveat that this study is to lay the foundation for future theory-building activities, and that it in itself does not have to produce a theory, so too a framework ascribes to a number of requirements associated with the qualification of theory, but not all of them.

Accordingly, where models describe relevant concepts and relationships that influence what happens, frameworks have explanatory power yet fall short of ascribing to all of the criteria to qualify as theory (Naumann, 1984). As such, frameworks are said to pre-cede theory and may substitute for theory in many ways (Naumann, 1984). The theory embodied in frameworks is encapsulated in the choice and organisation of the variables and questions proposed to the user(s).

Consequently, a framework allows for the fact that not all of the possible interactions, scenarios and outcomes can be rigorously examined. Rather a framework, by posing a series of questions, aims to help guide the user(s) to analyse, define and understand the business and its environment and come up with different strategic options, and to help the user(s) choose among these options (Porter, 1991).

As is described in Chapter 2, which reviewed the three types of frameworks and their explanatory power, the framework will need to progress beyond conceptual induction to provide guidelines to managers. As the resulting framework will contain composite variables and fuzzy boundary criteria, it will resemble a conceptual system but fall short of theory.

6.2.2 Method

In accordance with the systems engineering approach, in order to develop the resulting framework, the study has to:

- **Third quadrant:** integrate, synthesise and re-synthesise solutions into an emerging new 'theory' from the interactions of the system elements developed in the second quadrant.

In order to complete the tasks prescribed by the third quadrant, this study will utilise concept mapping.

Concept mapping is a tool for developing and clarifying theory (Maxwell, 2012), or in this case frameworks that qualify as pre-theory. It was first introduced by Joseph Novak (Novak & Gowin, 1984) as a means to understand how students learn science, and later as a method to teach science. (Maxwell, 2012, p. 54):

> *"A concept map of a theory is a visual display of that theory – a picture of what the theory says is going on with the phenomenon you're studying. These maps do not depict the study itself, nor are they a specific part of either a research design or a proposal. Rather, concept mapping is a tool for developing and presenting the conceptual framework for your design. And like a theory, a concept map consists of two things: concepts and the relationships among these. These are usually represented, respectively, as labelled circles or boxes and as arrows or lines connecting these".*

There are two dominant reasons for using concept maps, and in the case of this study, these two reasons help to address the third quadrant of the systems engineering approach. Concept maps aid in:

1. Pulling together and making visible the existing or implied theory, thus allowing the implications, limitations and relevance thereof to be reviewed.

2. Developing theory by revealing connections, identifying shortcomings and contradictions of the existing theory, and resolving these.

Concept maps have different purposes, which include but are not limited to:

- Abstract framework mapping the relationship among concepts,
- Flowcharts of accounts of events and how these may be connected,
- Causal networks of variables or influences,
- Tree diagrams of the meanings of words, and
- Venn diagrams representing concepts as overlapping circles,

Developing a concept map follows the following generic process (Maxwell, 2012):

1. identifying key words and important concepts from existing research,
2. categorising these concepts according to features, characteristics, implications and/or properties,
3. drawing connections and relationships between the various concepts to understand what is going on and why,
4. repeating steps 1-3 to create sub-categories and increasing the depth and level of detail,
5. Repeating steps 1-4 as an iterative process to increase clarity,
6. Verifying and validating the ultimate theory by explaining it to experts and asking them to probe it for shortcomings.

Accordingly, the following section will execute the concept mapping process to develop the framework in support of the systems engineering method, in alignment with the framework development process as proposed by Jabareen (Jabareen, 2009) with the task of verifying and validating the final framework occurring in Chapter 7.

In reference to the extract from Figure 38 as illustrated in Figure 39 below the chapter will execute the concept mapping process by:

1) Identifying design considerations in addition to the consolidated requirements developed in Chapter 3,4 and 5;
2) Categorising the design considerations and requirements according to their implications and restrictions;
3) Drawing connections between the various concepts by:
    a. Firstly, only considering the requirements associated with SME survival and growth to develop a sub-framework of understanding,
    b. Secondly, developing a sub-framework by considering the requirements associated with strategy formation and formulation and integrating the sub-framework within the sub-framework associated with SME survival and growth, and
    c. Thirdly, comparing the requirements associated with SME survival and growth as well as strategy formation and formulation with the VC decision criteria.
4) Process 1, 2 and 3 of the methodology will then be repeated to create sub-categories of understanding by considering all of the requirements associated with the solution objective.

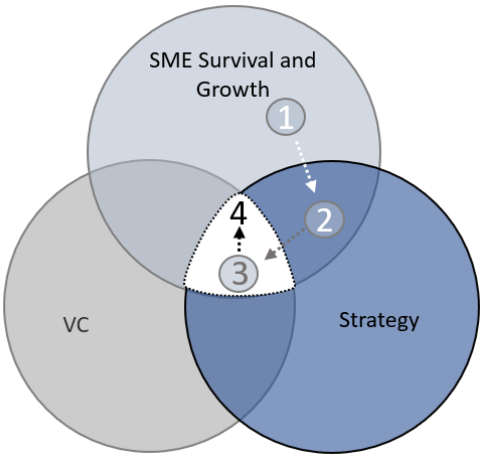


Figure 39 - Framework Development Process Extract

In order to limit duplication within the concept mapping process and with the systems engineering approach having identified the key words and concepts from literature through the formulation of requirements in Chapters, 3, 4 and 5; and with the additional requirements and design considerations utilising the categorisations as proposed by Van Aken, et al., (2006)

as inspirational guide, the chapter will combine processes 1 and 2 of the concept mapping method.

6.3 Conceptual Framework Development

The purpose of this section is to demonstrate the use of concept mapping as a development process to formulate the ultimate framework.

6.3.1 Step 1 & 2 – Identify and Categorise Key Words and Concepts

In accordance with the concept mapping methodology, the process of identifying key words and concepts entails reviewing the consolidated requirements derived from the literature and deriving additional requirements and design considerations associated with the scope of this study and its intended operating environment, as well as the use of the framework as a management tool.

Accordingly, additional requirements and design considerations were developed by utilising the requirement categorisation, as proposed by Van Aken et al. (2006) and used by Brockmoller (2008), Weber (2011), Krause and Schutte (2015) and Kennon (2017) as inspirational guide (see Section 2.5).

The categorisations are listed below for ease of reference.

1. Functional Requirements dictate performance demands on the design object;
2. User Requirements are specific requirements from the user's/users' perspective;
3. Boundary Conditions refer to reference conditions or constraints that have to be met unconditionally;
4. Design Restrictions are requirements that inform the preferred solution space via limits;
5. Attention Points are specifications that should be noted but that do not place restrictions on the design, and that therefore do not have to be specifically met.

The assignment of the requirements to the various categories is subjective in nature, which implies that the categorisation is subject to the author's perceptions and knowledge framework. However, the impact of the author's perceptions and knowledge framework is understood to be limited, as the encompassing functional and user requirements developed from the literature study need to be adhered to; moreover, the additional requirements provide additional and supplementary design considerations.

In order to distinguish new requirements and design considerations from the functional requirements derived from literature, the requirements which directly relate to those consolidated in Chapters 3,4 and 5 are designated with a prefix within the rationale column of Table 38, according to the following rubric:

- S&G – An SME survival and growth consolidated requirement as derived in Chapter 3.
- STRAT – A strategy consolidated requirement as derived in Chapter 4.
- VC – A VC consolidated requirement as derived in Chapter 5.

6.3.2.1 User Requirements

Two sets of users were taken into account with regard to developing the user requirements, as summarised in Table 37 below. The first set of users comprises the facilitators/consultants, while the second set comprises the SME management and the employees. The primary user of the framework has to provide management and employees, as the secondary users, context regarding its use, and has to facilitate the use of tools that develop answers to the questions captured within the framework.

Table 37 - User Requirements

ID	Requirement	Rationale
U1	The framework has to be applicable across a number of industries and to cater for differing sizes of SMEs.	As per the definition of an SME in Chapter 3, SMEs differ in terms of size, number of employees and sector.
U2	The framework needs to take into account the context of South African SMEs, in particular with regard to resource constraints.	SMEs are almost by definition characterised by resource constraints (Section 3.3).

ID	Requirement	Rationale
U3	The framework as decision aid needs to be communicable and therefore simple and easy to understand.	SMEs have employees with varying degrees of education; the framework, as a tool to assist in, amongst other things, the emergent strategy process and hence decision making at varying levels within the SME, needs to be understood by employees at all levels of the firm.
U4	The framework should be flexible in allowing the facilitator/consultant to utilise their own selection of tools and processes to answer the framework's questions and achieve the objectives within each step.	The framework should allow for the use of new tools, which may not exist at present, and which may be more effective in eliciting participation and the creation of knowledge to satisfy the goals and requirements of the framework.
U5	The framework should enable and support individual and group participation and allow the user(s) to take ownership of the ultimate design of the strategy.	With implementation being a function of involvement and associated commitment to the design, the framework should support individual and group participation and therefore ownership amongst all user(s)s. See Requirement STRAT11 of strategy in Section 4.8.

6.3.2.2 Functional Requirements

The functional requirements stipulate the specific functions the framework has to accomplish, i.e., the specific results the framework has to deliver, whereas the non-functional requirements, which are also known as 'quality requirements', impose performance standards. Alternatively, functional requirements can be understood as 'must do requirements', whereas non-functional requirements represent 'shall be' requirements. Evident from Table 38 below is that all of the consolidated requirements derived from the literature qualify as functional requirements.

Table 38 - Functional Requirements

ID	Requirement	Rationale
F1	The use of the framework should lead to an improved understanding of the	The primary objective of the research is to provide a management tool to improve

ID	Requirement	Rationale
	factors that affect SME survival and growth and the development of strategy in support of increasing the firm's chances of success.	understanding of the elements that affect SME survival and growth, and to assist SMEs in formulating successful strategies.
F2	The framework will require the user(s) to state their motivation for growth and willingness to engage in entrepreneurial actions.	S&G – 1: Entrepreneurial actions assist SMEs in overcoming obstacles and obtaining success factors associated with survival and growth, and are a key venture capital decision criterion.
F3	The framework will require the user(s) to identify and justify the information asymmetry about the market opportunity from a demand and supply (transaction cost) perspective.	S&G – 2: Survival and growth is function of profit, which in turn is determined by exploiting a disconnect in supply and demand.
F4	The framework will require the user(s) to identify the means to transfer knowledge to the right customers as to the benefits and legitimacy of the offering.	S&G – 3: Profit is a function of market adoption, which in turn is affected by the perceived value in the eyes of the customer and their view of risk associated with the offering.
F5	The framework will require the user(s) to identify the information asymmetry and required success criteria relating to execution of the opportunity.	S&G – 4: Survival and growth are reliant on an internal capability to execute upon an opportunity better than the competition, which has associated service or product benefits i.e. speed, cost, etc.
F6	The framework will require the user(s) to identify risk reduction strategies to overcome risks and resource shortcomings and evaluate under which circumstances these strategies will fail.	S&G – 5: Firm survival and growth is associated with the acquisition of or negating the need for knowledge associated with ignorance within a particular domain. Strategies to address these risks are not absolute and have to be managed.
F7	The framework will require the user(s) to identify the means of demonstrating the legitimacy of the opportunity and the firm to internal and external stakeholders.	S&G – 6: Gaining access to resources internal and external to the firm is affected by the perception of the internal and external stakeholders of the legitimacy of the proposed enterprising endeavour.
F8	The framework will require the user(s) to identify how they can justify their knowledge or beliefs related to an	S&G – 7: Survival and growth are a function of acting upon knowledge that is validated as true and correct, as well as upon new

ID	Requirement	Rationale
	existing opportunity, and how they will be able to identify new information related to their knowledge set and modify it accordingly.	information, and hence overcoming absorptive capacity limitations.
F9	The framework will require the user(s) to identify future obstacles as the business grows, and to understand as well as decide how and when they will address them.	S&G – 8: Firms are faced with a series of obstacles associated with their development. Subsequently survival and growth is contingent on correctly identifying and addressing these obstacles.
F10	The framework will require the user(s) to identify how they will identify new knowledge related to new opportunities.	S&G – 9: Growth is contingent upon identifying and exploiting new opportunities external to the firm.
F11	The framework will require the user(s) to identify how they will exploit their resource base to pursue new opportunities.	S&G – 10: Growth is contingent upon identifying means to leverage, modify and recombine internal resources to exploit new opportunities.
F12	The framework will need to illustrate the elements of successful strategy formulation and allow the user(s) to understand the interplay between formal strategy formulation and emergent strategy realisation against the backdrop of the factors that affect SME survival and growth.	STRAT – 1: Survival and growth are contingent upon successful strategy formulation being a core competency. Successful formulation and emergent strategy formation at the different levels of the firm are associated with decisions being made in alignment with the factors that support firm success.
F13	The framework will require the user(s) to explore and define their understanding of the customer context and identify the customers' current and future and what may be unknown core needs.	STRAT – 2: With survival and growth being a function of knowledge related to a disconnect in supply and demand (F3), price is a function of customer utility, i.e., the degree to which the offering addresses the need.
F14	The framework will require the user(s) to explore and define their understanding of the firm's external context and identify alternate existing and future success potentials with favourable strategic characteristics now or pursuant to the implementation of isolating mechanisms.	STRAT – 3: Survival and growth are not only a function of obtaining the success criteria, but also of negating the sources of failure and/or their impact, i.e., competition.

ID	Requirement	Rationale
F15	The framework will require the user(s) to explore and define their understanding of the firm's internal context and assess the alternate means to reduce, negate or recombine the partners, resources, capabilities and competencies as internal success criteria to effect current and future operational excellence in light of the success potentials.	STRAT – 4: Survival and growth are contingent upon gaining access to or negating the need for success criteria associated with exploiting the opportunity. Survival and growth are not only a function of exploiting current opportunities but also future ones.
F16	The framework will require the user(s) to map the micro elements of the business model and isolating mechanism(s) in light of the intended offering, strategy and competitors on a suitable, easily communicable canvas.	STRAT – 5: Successful strategies take into account the micro elements required to effect the strategy; they can be easily communicated to everyone from a wholistic perspective in order to assist with the emergent strategy process.
F17	The framework will require the user(s) to align the intended strategy with the paradigms of blue ocean strategy.	STRAT – 6: Lasting supply and demand are exploited when strategies are developed through value innovation initiatives that limit the effect of competition and are executed upon.
F18	The framework will require the user(s) to develop a sense of purpose by developing a suitable mission and vision statement that may be reviewed throughout the process.	STRAT – 7: Strategies are effectively implement when mission and vision statements provide clarity, focus, direction, differentiation, motivation and support decision making associated with emerging strategy perspective.
F19	The framework will require the user(s) charged with executing the strategy to develop short- and medium-term objectives for future review.	STRAT – 8: Successful strategies are the result of an evolutionary process and the creation of knowledge that initiates with short term actions to be reviewed.
F20	The framework will require the user(s) to develop a visual and effective means of communicating the strategy content in support of successful strategy implementation.	STRAT – 9: Strategies are successfully implemented when they are correctly understood. Visual representations overcome miscommunication issues.
F21	The framework as a continuous tool will require user(s) to assess and review the success of the strategy against the objectives and require them to answer	STRAT – 10: Review of a strategy's performance assists in the creation of knowledge and supports learning and adaptation.

ID	Requirement	Rationale
	whether they are not only 'doing things right', but are also 'doing the right things'.	
F22	The resulting framework should ascribe to and support the success criteria as derived by Lofving, et al., (2013).	STRAT – 11: The criteria as proposed by Lofving, et al., (2013) describe the procedural characteristics that enable successful strategy formulation in SMEs.
F23	The framework should be aligned with the venture capital decision criteria favoured by investors and the concept that venture capitalists prefer characteristics inversely associated with risk.	VC – 1: The financial requirements of SMEs may be beyond the financial means of the entrepreneur and the management team and their networks, requiring the SME to obtain funding from external parties.
F24	The framework should support its continued use.	SME survival and growth are a function of firms creating new knowledge to improve their own strategic fit as well as identifying and exploiting new opportunities.
F25	The framework should suggest tools that assist the user(s) in addressing the questions posed by the framework and achieving its objectives.	Although the framework should allow for facilitators or consultants to use their own tools, the framework should suggest tools (which may be altered) as a starting point.

6.3.2.3 Design Restrictions

Design restrictions define the scope of the intended framework, i.e., the preferred solution space in which the framework has to operate. No single framework can be all things in all situations, and therefore design restrictions critically guide the design process in knowing which elements need to be included or excluded; for instance, the framework has to use well-known tools and therefore certain tools are excluded from the framework. The applicable design restrictions are summarised in Table 39 below.

Table 39 - Design Restrictions

ID	Requirement	Rationale
R1	The framework is not intended to provide in-depth knowledge of each	Although the framework has to take into account the constraints of SMEs, the

ID	Requirement	Rationale
	element that affects successful strategy formulation in a single sitting, although its intensive use over a number of days may achieve this. Rather it is intended to be used iteratively, with learning occurring incrementally.	associated time constraints of SMEs will limit an in-depth exploration of the various elements required to formulate successful strategies in a single sitting. Facilitators may choose to concentrate on one or two elements of the framework, in order to institute action, feedback and learning; all of the elements have to be covered at some level during its use.
R2	The framework is not meant to provide prescriptive tools that may not be substituted. Rather the suggested tools are well known in academia and industry and are known to be effective in achieving the objectives of the framework.	The framework should consider that new tools may be developed in the future that are more effective and/or that certain consultants may have experience with and favour certain tools over others.
R3	Although the framework may be applicable to larger corporates, its intended use is within SMEs. Although SMEs may have nuanced factors that affect them, the framework is intended for the representation of SMEs as developed from theory, which is believed to be a reflection of SMEs in practice.	The framework has been developed from the academic literature. Given that academic studies attempt to formulate theory from real world observations, it is understood that the picture created of SMEs from literature is thus a reflection of practice.
R4	The framework is intended to support strategy formulation and although implementation is considered, the framework does not have to address the implementation processes of resource allocation, project selection, budgets etc.	With the framework intended as a strategy formulation tool, reviewing the processes and procedures concerned with implementation and review falls beyond the scope of the study and the intended tool.
R5	Use of the framework does not guarantee SME survival and growth; instead, it synthesises the current view of best practices and theory that support successful strategy formulation in SMEs.	Successful strategies are subject to a number of factors. The framework as a management tool should improve understanding as to what drives SME survival and success, and guide the user(s) to align their firms with the factors that will improve their probability of success.

ID	Requirement	Rationale
R6	The framework's objective is to provide a mental model for decision making; it is not intended to provide guidance regarding technical regulatory and tax issues.	SMEs are subject to a number of technical regulatory and tax considerations. Where the framework may induce the user(s) to understand the importance of these considerations, the SME will need to seek the advice of experts in these domains.
R7	The framework is intended to formulate strategies in alignment with venture capital decision criteria; however, strict adherence is not required, as SMEs may have other growth motivations or sources of financing.	SMEs may choose to make decisions by ignoring venture capital decision criteria, as they may not wish to grow to that extent or may have other forms of financing.
R8	The framework is intended to facilitate SME strategy formulation in alignment with venture capital decision criteria and is not intended to facilitate the venture capital process from an SME or venture capital perspective.	As with strategy execution there are a number of factors that affect a successful venture capital process, i.e., presentations, negotiations, etc., all of which fall outside the scope of this study.
R9	Given that the framework is not intended to facilitate the venture capital process, the venture capital firm specific factors or financial considerations do not have to be considered.	Differing venture capital firms have different mandates and therefore the process of choosing a venture capital firm and applying for funding falls outside the scope of this study.

6.3.2.4 Boundary Conditions

Boundary conditions are requirements that have to be met unconditionally for the framework to be utilised. These conditions were not informed by the literature review but were adapted from the work of Van Aken, et al., (2006), Brockmoller (2008), Weber (2011), Krause and Schutte (2015) and Kennon (2017) and impose reasonably assumed boundaries for the use of the framework.

Table 40 - Boundary Conditions

ID	Requirement	Rationale
B1	The framework should be utilised to the benefit of all the user(s); it is not intended to exploit certain user(s) or groups of users.	Due to knowledge sharing being a critical component in the utilisation of the framework, the possibility exists, especially in the event of a power imbalance, that certain users may utilise the framework to exploit marginalised participants.
B2	The framework should be used in an ethical manner that adheres to regulations and legislation.	The author cannot control the use of the framework. Therefore, it is assumed that the framework will be used in an ethical manner in compliance with the applicable legislation and corporate governance restrictions.

6.3.2.5 Attention Points

Attention points are considerations the designer has to take into account as desirable but that are not absolute requirements, which have to be met by the ultimate framework. The inclusion of attention points allows for the development of a framework to be used within the firm but does not require the framework to be a procedural requirement for firm operations, i.e., the lack of continual use may not impose a risk on the firm, although it is believed the lack of its use will not benefit the firm. The relevant attention points are summarised in Table 41 below.

Table 41 - Attention Points

ID	Requirement	Rationale
A1	The facilitator/consultant has to have previous knowledge of group facilitation and strategy to guide the process.	The experience that users have with the framework will influence its continued use. It is reasonable to assume that facilitators with the necessary experience will be able to guide the process to be effective and address any conflicts as they arise.
A2	Certain tools and considerations used within the framework will be discretionary, a function of the	The facilitator, entrepreneur and management team may choose to use a single or multiple tools depending on their belief as

ID	Requirement	Rationale
	background and experience of the facilitator, the entrepreneur and management team.	to whether the objectives will be met and whether the tool is applicable to their situation.
A3	The level of detail to delve into each element is at the discretion of the facilitator and the team, based on the objective of the strategy formulation exercise.	With the tool intended for repetitive use, certain elements may need review where others may only need cursory consideration.

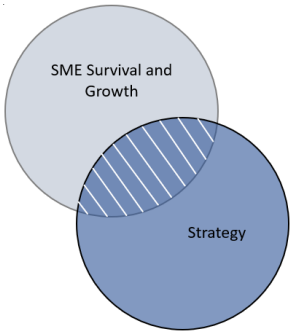
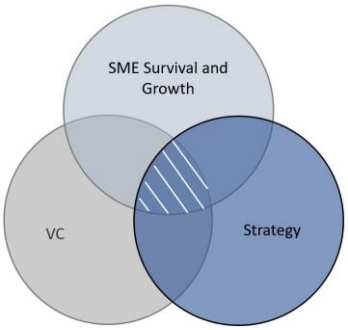
6.3.2 Step 3 – Drawing Connections

In accordance with the systems engineering method the following section will develop frameworks of understanding at increasing levels of depth, by drawing connections from the functional requirements (categorised in Section 6.3.1 i.e. F1) derived from the literature, with it being understood that the user requirements, boundary conditions, design restrictions and attention points have procedural implications and are applicable to the framework and hence to the process as a whole. These design considerations will not be omitted and will be verified against the framework in Chapter 7 according to the concept mapping methodology.

With the progression of theory in steps 1 through 3, as illustrated in Figure 38 the following section will follow the process outlined in Table 42 below.

Table 42 - Framework Development Process

Depiction	Description
	**Step 1:** Develop a framework of understanding regarding the factors that affect SME survival and growth, by limiting the review to the requirements from Chapter 3;

Depiction	Description
	**Step 2:** Develop a framework of understanding with regard to successful strategy formation and strategy formulation processes within the SME survival and growth sub-framework, by reviewing the requirements developed in Chapter 4;
	**Step 3:** Review the alignment between the VC decision criteria, identified in Chapter 5, and the requirements associated with SME survival and growth and successful strategy formation and formulation.

6.3.2.1 SME Survival & Growth

As a consequence of the requirements derived from literature in Chapter 3, illustrated in Table 43Table 43 - SME Survival and Growth Requirements below for ease of reference, the dissertation concludes the following supposition and framework regarding the defining characteristics that underpin the survival and growth of new ventures and SMEs.

The framework, as illustrated in Figure 40, utilises the SME model of growth as proposed by Wiklund, et al., (2009) as its foundation, and introduces the concepts related to the theory of the firm, the liability of newness and the dynamic states perspective of growth.

The survival and growth of new ventures and SMEs is contingent upon the entrepreneur and management recognising that the firm is a complex adaptive system comprised of a resource set, at the heart of which is knowledge (F3, F5, F6, F8).

In accordance with the theory of the firm, the internal context of the firm consists of a pool of resources (both tangible and intangible) at the disposal of the firm, with the firm's collective knowledge affecting how and which opportunities it pursues.

The internal context of the firm, however, is not isolated from the external context, as the individuals who make up the firm are in constant interaction with the external world during their daily activities, which affects their and consequently the firm's collective knowledge base.

The framework illustrates that survival and growth are a function the firm's motivation to achieve growth (F2), which in turn is influenced by the firm's internal context, i.e., management's previous experience and resources at their disposal, as well the external context regarding business opportunities and competition.

Such an attitude towards growth and the subsequent motivation to achieve it will affect the firm's entrepreneurial orientation (F2), i.e., the active willingness of the firm to pursue opportunities, overcome obstacles, address risks, gain access to resources, and recombine resources to pursue new opportunities.

This entrepreneurial orientation will determine the purpose of the firm, i.e., the fact that it wants to find and exploit opportunities. This purpose in turn will affect strategic fit through the choice of strategy to acquire knowledge (F6), overcome perceptions of novelty (F7), and address obstacles and risks, as well as obtain the necessary success factors (F5) within the market (F4), production and management domains.

The degree of strategic fit, in other words, the match between the external opportunity and the internal ability to execute upon it, will determine the performance of the firm, as well as the external and internal context of the firm.

- Externally, the firm's performance may provide information to consumers as well as competitors as to the opportunity at hand and the means by which the firm is exploiting it.
- Internally, performance may provide the firm with information regarding the validity of its knowledge or beliefs (F8) and may provide access to more resources.

In accordance with the extension of the liability of newness construct and the dynamic states model of growth, the degree of strategic fit is in constant flux due to the changing external and internal environments (F8) (F9), thus affecting the required success factors as well as the degree of novelty of the firm associated with these success factors.

The process of survival and growth is therefore continual (F8), as (1) information is absorbed by competitors, which reduces information asymmetry and affects the immediate opportunity, and (2) the firm's evolution presents new required success factors and obstacles to overcome (F9).

Ultimately, sustained growth is associated with the continued entrepreneurial actions of the firm in identifying and pursuing new opportunities, demonstrated by the multiple layers of strategic fit for each opportunity as indicated in Figure 41, which requires the firm to absorb new information and recombine and exploit their resources (F10) (F11).

Requirement (F1) is not omitted from the framework as it is conceptual in nature and applicable to the framework as a whole and will be verified in Chapter 7.

Table 43 - SME Survival and Growth Requirements

ID	Requirement
F2	**Motivation:** The framework will require the user(s) to state their motivation for growth and willingness to engage in entrepreneurial actions.
F3	**Market Opportunity**: The framework will require the user(s) to identify and justify the information asymmetry about the market opportunity from a demand and supply (transaction cost) perspective.

ID	Requirement
F4	**Adoption**: The framework will require the user(s) to identify the means to transfer knowledge to the right customers as to the benefits and legitimacy of the offering.
F5	**Execution**: The framework will require the user(s) to identify the information asymmetry and required success criteria relating to execution of the opportunity.
F6	**Resource**: The framework will require the user(s) to identify risk reduction strategies to overcome risks and resource shortcomings and evaluate under which circumstances these strategies will fail.
F7	**Legitimacy**: The framework will require the user(s) to identify the means of demonstrating the legitimacy of the opportunity and the firm to internal and external stakeholders.
F8	**Cognitive**: The framework will require the user(s) to identify how they can justify their knowledge or beliefs related to an existing opportunity, and how they will be able to identify new information related to their knowledge set and modify it accordingly.
F9	**Scaling**: The framework will require the user(s) to identify future obstacles as the business grows, and to understand as well as decide how and when they will address them.
F10	**Opportunity**: The framework will require the user(s) to identify how they will identify new knowledge related to new opportunities.
F11	**Expansion**: The framework will require the user(s) to identify how they will exploit their resource base to pursue new opportunities.

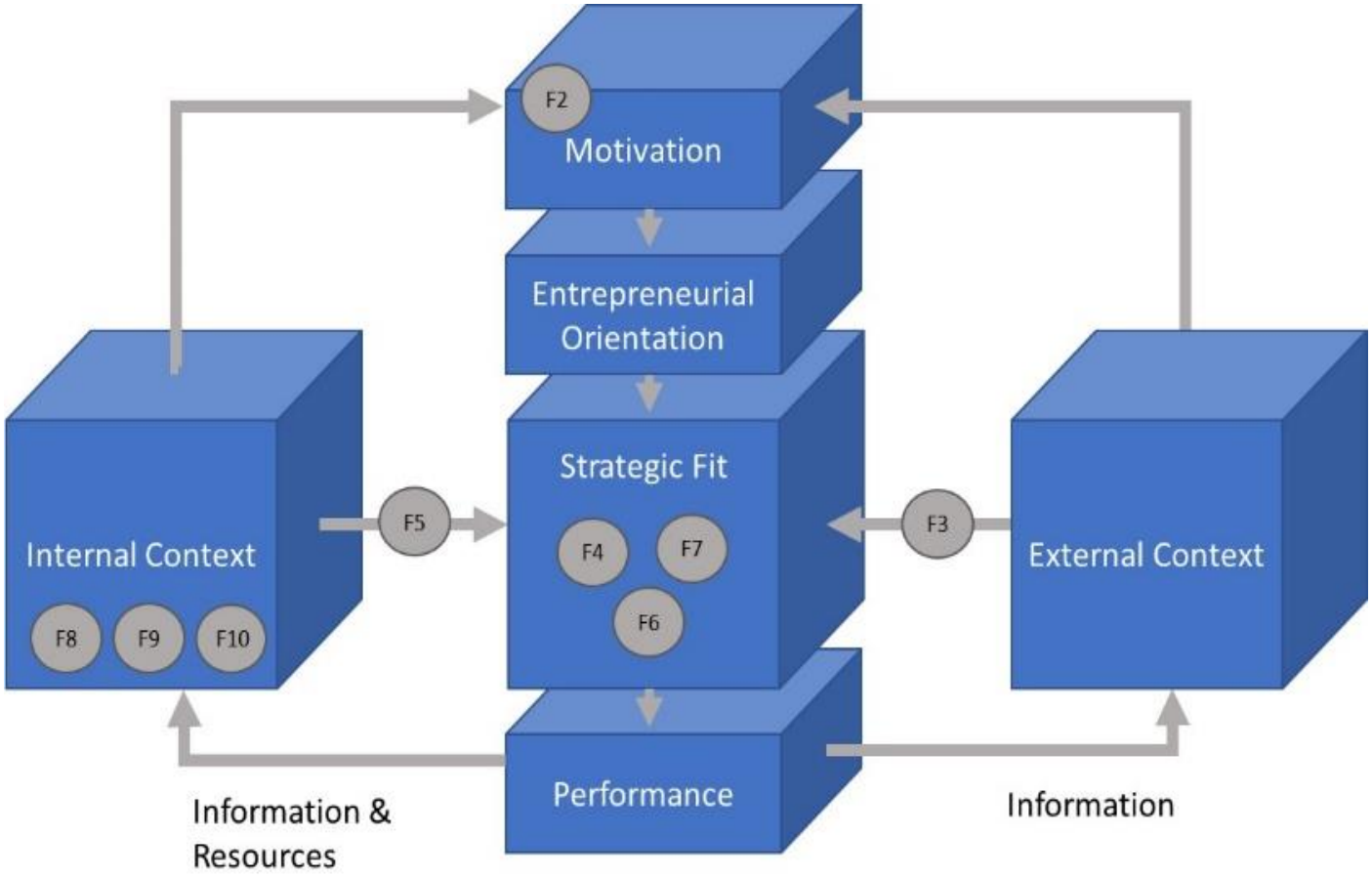


Figure 40 - SME Survival & Growth Sub-Framework

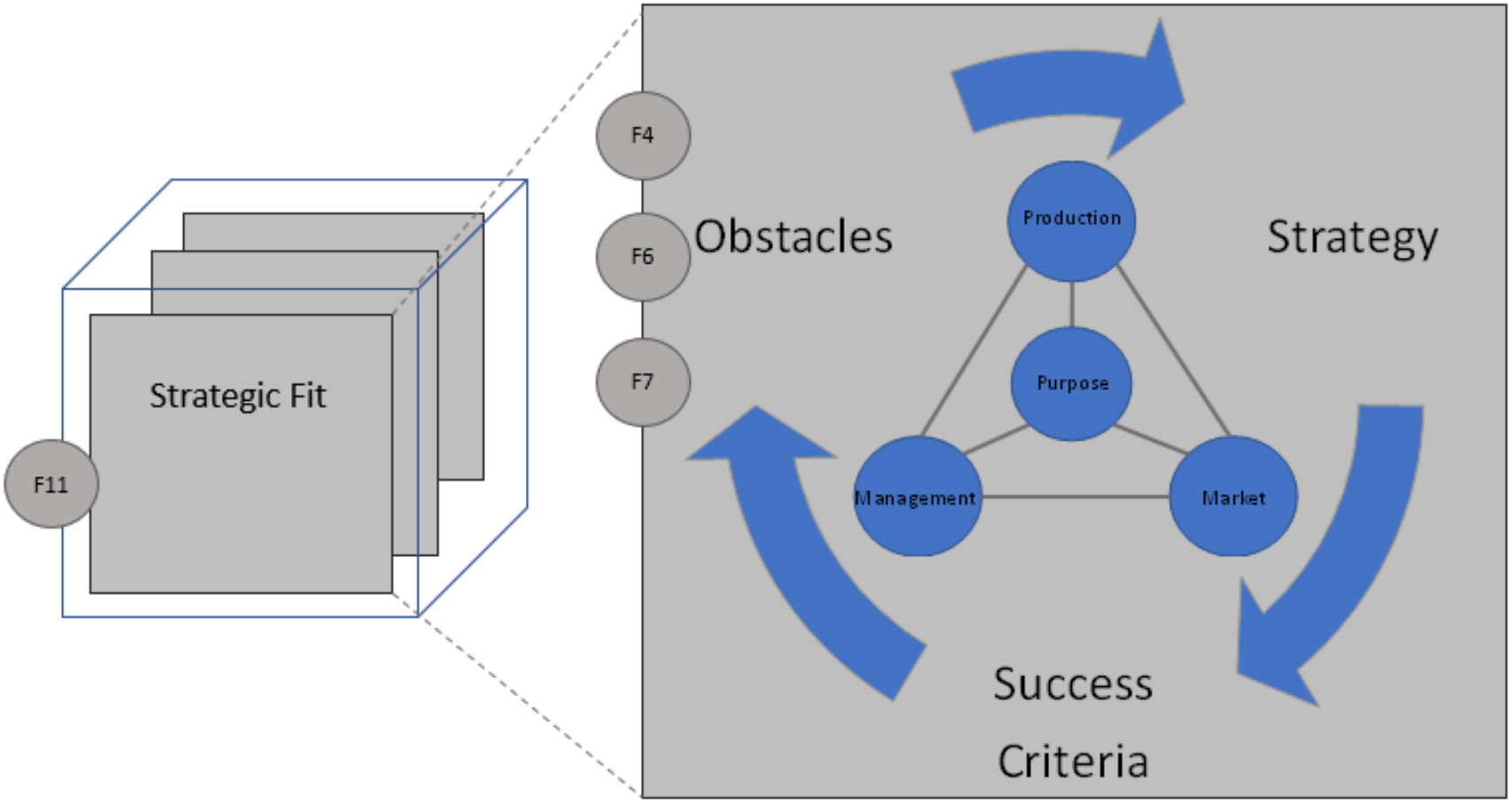


Figure 41 - Strategic Fit Layer

6.3.2.2 Strategy Formation in SMEs

Reviewing the requirements associated with developing successful strategies in SMEs, the dissertation will:

1. first consider the functional requirements associated with the correct approach to strategy development, before
2. contemplating the more detailed components and associated functional requirements of the strategy formulation process.

6.3.2.2.1 STRATEGY DEVELOPMENT APPROACH

The dissertation ascribes to the following supposition regarding what is strategy and the correct approach to strategy development. The supposition is informed by requirements (F12 & F21) and the supporting literature, which resulted in the development of the requirements.

The dissertation ascribes to the belief that the core paradigm underpinning successful strategies is that strategy formation is evident at decision points with its purpose of (1) removing and overcoming possible sources of failure, and (2) identifying and obtaining sources of success.

The belief that strategy is evident at decision points is informed by the emergent strategy perspective and the realisation that daily decisions influence strategy, with the associated impact of the sources of success and failure being a function of the parallel responsibilities of strategic management.

The statement above is closely aligned with the definition of strategy provided in the opening statement of the strategy chapter (Chapter 4), i.e., that strategy is the art of the general and that a general's responsibility is to create positions that assure victory.

The core paradigm statement, however, highlights an important yet somewhat intuitive underlying concept, in that to improve the chances of victory one must remove, nullify and overcome factors that may result in defeat.

This intuitive and seemingly trivial distinction has some important implications for the understanding of strategy, as the mere acquisition of success factors does not negate the impact of sources of failure; in other words, the mere acquisition of knowledge and resources does not negate the impact of competition.

Therefore, strategy, in contrast to the liability of newness concept, has dual objectives in wanting to overcome obstacles and address risks by obtaining knowledge and the necessary success factors, but just as importantly, strategy has to address how sources of failure (competition) will be addressed.

The strategy as practice perspective informed the dissertation's viewpoint that successful strategies are born from strategy formulation being a core competency within the firm; in other words, strategy formulation is a purposeful activity, of which there is tangible knowledge.

This tangible knowledge not only refers to the successful elements of the process of strategy formulation itself but also to understanding their interplay within the strategy formation process and the elements within the survival and growth framework of the firm.

Accordingly, successful strategies are the result of the combination of the deliberate and emergent strategy perspectives with the content from the formal strategy process providing a guide and decision support mechanism for the daily emergent strategy activities.

The combination of the deliberate and emergent strategy perspectives also highlights the fact that successful strategies are formed as part of an evolutionary process requiring short-term action from the deliberate strategy perspective, coupled with review, learning and adaptation from the emergent strategy perspective.

The core paradigm and accompanying beliefs ascribe to the 5 Ps of strategy, namely:

1. **Plan:** The decision-making process can be explicit and tangible prior to taking action with a specific goal in mind of obtaining the elements of success and avoiding the pitfalls of failure.

2. **Ploy:** The outcome of the strategy may be an action or a set of actions designed to outmanoeuvre or outwit a competitor in an attempt to negate or nullify a source of failure.
3. **Pattern:** The daily decision makers can look to the formulated plan and make decisions that are aligned towards success and the avoidance of failure.
4. **Position:** This refers to the concept of obtaining a market position outside of the firm in order to avoid sources of failure, and to obtain a favourable position as a source of success.
5. **Perspective:** The plan as the outcome of the strategy formulation process is the result of the formulators' perspectives, i.e., their view of the sources of success or failure.

From the supposition, the dissertation developed the sub-framework illustrated in Figure 42 below regarding strategy formation within the survival and growth framework of SMEs.

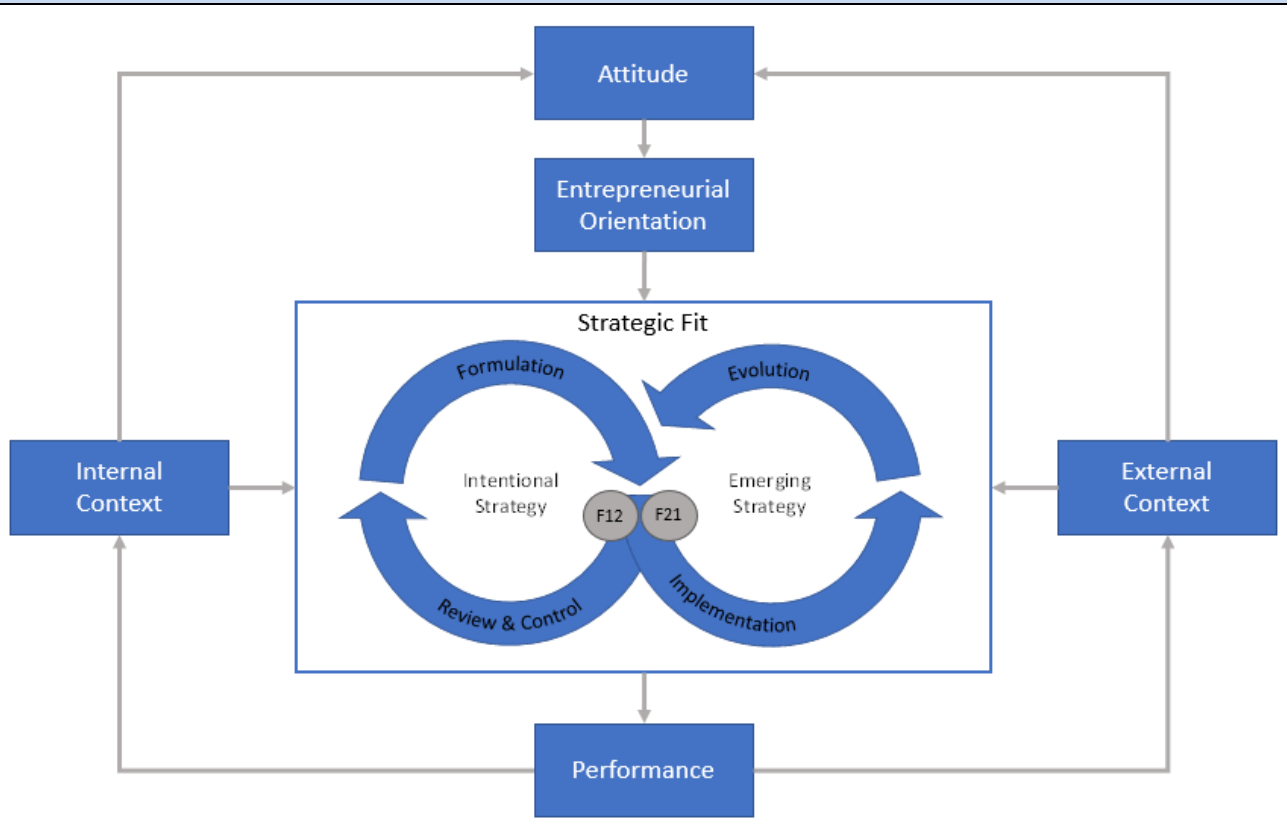
Requirements	Sub-Framework
F12: **Strategy as Practice:** The framework will need to illustrate the elements of successful strategy formulation and allow the user(s) to understand the interplay between formal strategy formulation and emergent strategy realisation against the backdrop of the factors that affect SME survival and growth.	
F21: **Review:** The framework as a continuous tool will require user(s) to assess and review the success of the strategy against the objectives and require them to answer whether they are not only 'doing things right', but are also 'doing the right things'.	

Figure 42 - Strategy Formation & SME Growth Model

From the framework the following explanatory powers are brought to light i.e. the framework can start providing guidelines to managers.

Strategic fit is the result of strategy formation. If the strategy is implemented as formulated in the intentional strategy loop, then the emerging strategy loop is simply an implementation loop. In the absence of a planned strategy, however, the emerging strategy loop resembles that of the traditional emerging strategy perspective.

The perspective of strategy as a plan (i.e., the intentional strategy loop) supports the concept of strategic leadership, i.e., designing and developing existing and new success potentials, taking into account the internal and external context of the firm; in contrast, the perspective of strategy as a process (i.e., the emerging strategy loop) supports operational leadership, i.e., learning and subsequent knowledge of what works and what does not.

Where the two loops interact, strategy formation is taking place, i.e., the process of the continued and interdependent activities and interactions of strategy formulation, implementation, evolution and review and control.

Successful strategies enable the attainment of success factors and negate sources of failure, and subsequently effect a high degree of strategic fit, with commensurate favourable implications for SME survival and growth. Successful strategies in turn are the result of strategy as practice being a core competency, i.e., the ability to formulate successful strategies being a function of tacit knowledge regarding:

1. the process of successful strategy formation,
2. the elements and their interaction within the SME survival and growth framework, and
3. the successful interplay between the intentional and emergent strategy perspectives.

Although the dissertation allows for the process of strategy formation at a business and functional level, where interaction with the market occurs, the scope of the dissertation is limited to a framework that addresses strategy formulation at a corporate level. That is not

to say that the dissertation does not see a number of parallels regarding the process and requirements for successful strategy formulation at any decision point, however the nuances that need to be explored fall outside the scope of this study.

Accordingly, the dissertation ascribes to the belief that successful strategy formulation is the result of a balance between planning and learning in alignment within the strategy as practice perspective. In accordance with the strategy as practice perspective, moreover, the strategy formulation process should prioritise the discovery of knowledge by recognising the power of the collective, as well as the need to collaborate in exploring the solution space through the process of being inventive in crafting the strategy.

6.3.2.2.2 STRATEGY FORMULATION

Having established a supposition regarding the correct approach to strategy formation, and in accordance with the methodology, the dissertation now considers the additional requirements of F13 to F21 associated with successful strategy formulation.

Reviewing the strategy formulation requirements (illustrated in Table 44 for ease of reference), the dissertation ascribes to the high-level process depicted in Figure 43 below within the intentional strategy formation loop, as a progression of the SME survival and growth sub-framework presented in Section 6.3.2.1, and discussed below.

Table 44 - Strategy Formulation Requirements

ID	Requirement
F13	The framework will require the user(s) to explore and define their understanding of the customer context and identify the customers' current and future and what may be unknown core needs.
F14	The framework will require the user(s) to explore and define their understanding of the firm's external context and identify alternate existing and future success potentials with favourable strategic characteristics now or pursuant to the implementation of isolating mechanisms.

ID	Requirement
F15	The framework will require the user(s) to explore and define their understanding of the firm's internal context and assess the alternate means to reduce, negate or recombine the partners, resources, capabilities and competencies as internal success criteria to effect current and future operational excellence in light of the success potentials.
F16	The framework will require the user(s) to map the micro elements of the business model and isolating mechanism(s) in light of the intended offering, strategy and competitors on a suitable, easily communicable canvas.
F17	The framework will require the user(s) to align the intended strategy with the paradigms of blue ocean strategy.
F18	The framework will require the user(s) to develop a sense of purpose by developing a suitable mission and vision statement that may be reviewed throughout the process.
F19	The framework will require the user(s) charged with executing the strategy to develop short- and medium-term objectives for future review.
F20	The framework will require the user(s) to develop a visual and effective means of communicating the strategy content in support of successful strategy implementation.
F21	The framework as a continuous tool will require user(s) to assess and review the success of the strategy against the objectives and require them to answer whether they are not only 'doing things right', but are also 'doing the right things'.
F22	The resulting framework should ascribe to and support the success criteria as derived by Lofving, et al., (2013).

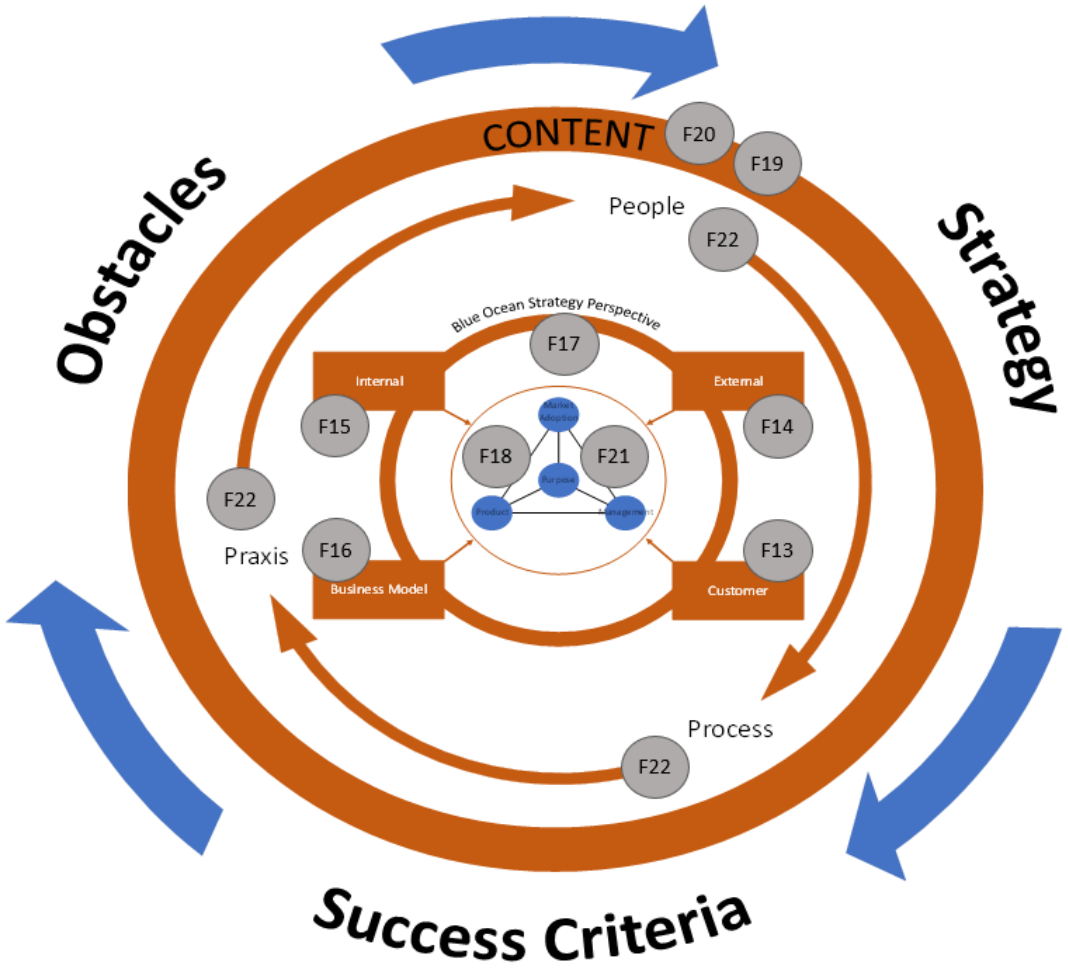


Figure 43 - High Level Strategy Formulation Process

According to Figure 43 above, this dissertation ascribes to the supposition that, at the centre of the strategy formulation process is purpose, as this defines the motivation and acts as a guide for the process; this purpose should be continually referred to and amended if necessary (F18, F21). Just outside the centre and at the core of the process is the discovery of knowledge, which is related to the survival and growth of an SME in pursuit of the purpose (F21).

This discovery of knowledge is facilitated by considering the current and future sources of success and failure in light of:

1. the current and future internal and external context of the firm (F14, F15),
2. the customers' current and future core (unmet) needs (F13),
3. the business model and micro elements required to deliver value to the customer (F16), and
4. the blue ocean strategy ethos of focusing on the need for market adoption, reducing or negating the number of success factors required to deliver the product or service, and addressing management risk by building execution into the strategy (F17).

In alignment with the strategy as practice perspective, the process in itself requires (F22):

1. the right people with the necessary knowledge and execution power to deliver upon the strategy and critically to commit to the objectives and timelines,
2. the right process that fosters communication, involvement, creativity and learning, and
3. the right praxis (practices) as the activities and tools that support and bind together the process.

The content created throughout the process and as the ultimate product of the process should be visual, effectively communicate the 5Ps of strategy (F20), and provide short- and medium-term goals (F19).

In alignment with the SME survival and growth framework, the entire process of strategy formulation is wrapped in the objective of identifying obstacles and success factors, with strategy as the means to overcome or negate knowledge shortcomings and sources of failure and set a path towards success by improving strategic fit.

Figure 44 illustrates how the strategy formulation framework is embedded within the strategy approach and the SME framework of survival and growth, as proposed in Sections 6.3.2.1 and 6.3.2.2.1. The strategy formulation framework will be further developed upon in Section 6.3.3 as the concept mapping process is repeated to reveal sub-categories of understanding.

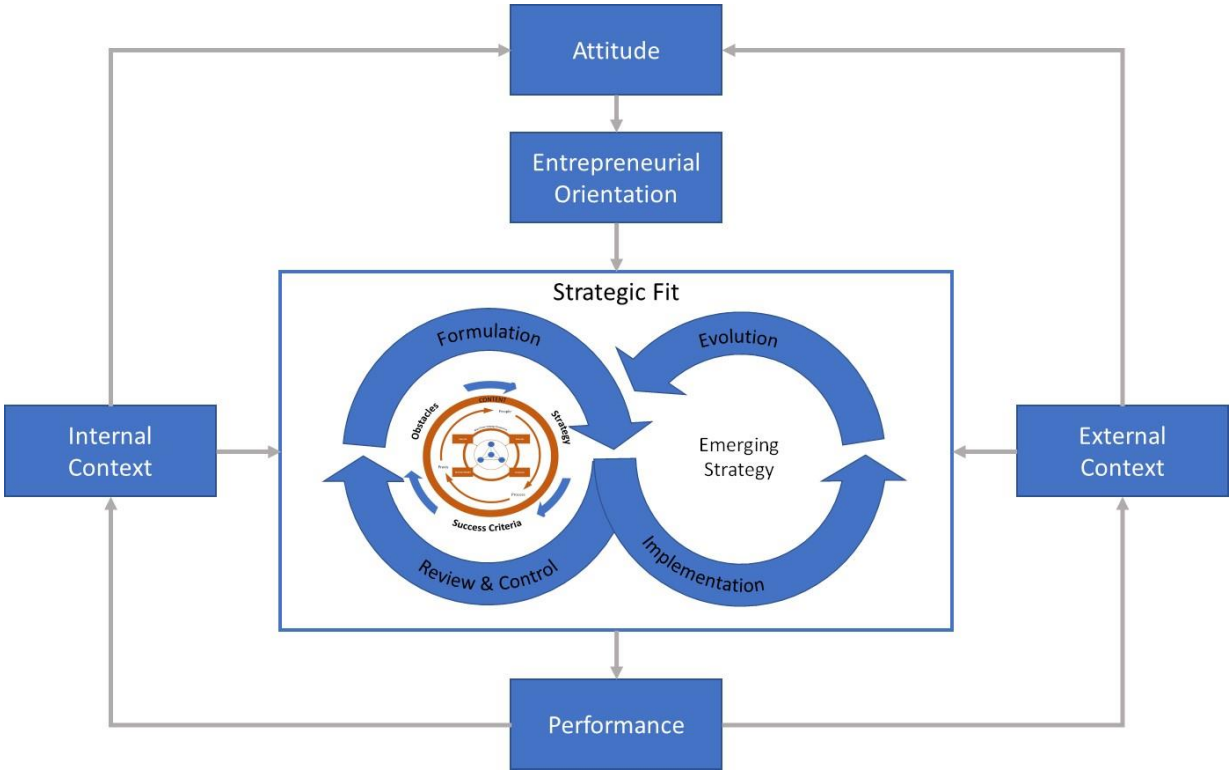


Figure 44 - Embedded Strategy Formulation Process

6.3.2.3 Venture Capital

In accordance with the scope of the study and the framework development process depicted in Table 42, the VC decision criteria and process will not be assessed to develop an independent framework. Rather, the dissertation will evaluate the alignment of the requirements of SME survival and growth, as well as strategy formulation and therefore their

associated frameworks, in terms of the VC decision criteria. Should any misalignment or omissions come to light, these will need to be included in the relevant framework.

In comparing the VC decision criteria to the requirements derived from theory, the following assumptions were made:

- **Innovativeness:** The consideration related to innovation was extended to include innovation associated with the business model or the utilisation of resources, which has associated benefits for the product or service, i.e., reduced cost or improved speed.
- **Patentability:** Similarly, the investment consideration associated with patentability was extended to include isolating mechanisms or other means that may limit or impede competition, as this is the underlying goal of obtaining patents.

The matrix in Figure 45 illustrates the relevant cross-reference of the VC decision criteria to the applicable SME survival and growth as well as strategy formulation requirements derived from theory.

Survival & Growth Requirements		VC Requirements Derived from Literature															
Requirement ID	Requirement Domain	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Count
S&G - 1	Motivation	●		●							●						3
S&G - 2	Market			●				●	●	●	●	●					6
S&G - 3	Adoption												●				1
S&G - 4	Execution		●		●	●	●	●	●	●		●					8
S&G - 5	Resource		●	●	●	●	●										5
S&G - 6	Legitimacy		●		●	●	●						●				5
S&G - 7	Cognitive		●										●				2
S&G - 8	Scaling		●														1
S&G - 9	Opportunity	●		●								●					3
S&G - 10	Expansion	●		●								●					3
	Count	3	5	5	3	3	3	2	2	2	2	4	3	0	0	0	

Strategy Requirements		VC Requirements Derived from Literature															
Requirment ID	Requirement Domain	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Count
STRAT - 1	Strategy as Practice																0
STRAT - 2	Customer			●				●		●	●	●	●				6
STRAT - 3	External								●		●	●	●				4
STRAT - 4	Internal		●	●	●	●	●										5
STRAT - 5	Business Model							●	●								2
STRAT - 6	Blue Ocean							●			●	●					3
STRAT - 7	Purpose	●		●							●	●					4
STRAT - 8	Action																0
STRAT - 9	Content																0
STRAT - 10	Review																0
STRAT - 11	Process																0
	Count	1	1	3	1	1	1	3	2	1	4	4	2	0	0	0	

Figure 45 - VC Requirement Comparison Matrix

The motivation for ensuring the compatibility of the VC decision criteria to the respective requirements is presented in Table 45 below.

Table 45 - Venture Capital Compatibility with Requirements

VC Decision Criteria	Applicable Requirement	Motivation
VC Character	S&G – 1, 9, 10 STRAT - 7	The requirements associated with the firm needing to stipulate its motivation for growth and willingness to engage in entrepreneurial actions as well as determine a sense of purpose are aligned with the VC decision criteria, as venture capitalists favour companies, which actively pursue growth that will result in investor return.
Leadership Capabilities	S&G – 4, 5, 6, 7, 8 STRAT - 4	The frameworks address this VC decision criterion, as leadership is demonstrated by

VC Decision Criteria	Applicable Requirement	Motivation
		measures validating the firm's beliefs, recognising the firm's shortcomings and devising ways to address how the firm will meet the necessary success criteria (now and as it grows) and demonstrate legitimacy, associated with executing upon the opportunity, especially from a 'management' knowledge perspective.
Commitment	S&G – 1, 2, 5, 9, 10 STRAT – 2, 4, 7	The requirements associated with motivation and determining a sense of purpose are part of the VC criteria of investing in firms, where the people and company are committed to achieving growth. Additionally, any efforts to validate market opportunities and overcome resource shortcomings may demonstrate the firm's commitment to exploiting opportunities in pursuit of growth.
Track Record	S&G – 4, 5, 6 STRAT - 4	Similar to leadership capabilities, these VC criteria are addressed too, as the frameworks support the discovery of knowledge, or recognition of a lack thereof; it requires the firm to address how it will meet the necessary success criteria and to demonstrate legitimacy associated with effectively executing upon opportunities.
Technical Qualification	S&G – 4, 5 ,6 STRAT – 4	
Business Qualification	S&G – 4, 5, 6 STRAT - 4	
Innovativeness	S&G – 2, 4 STRAT – 2, 5, 6	The requirements and hence the frameworks are aligned with this VC decision criterion through the principle of information asymmetry, i.e., a lack of readily available knowledge regarding the product, service offering or means of execution, which denotes a level of innovation.
Patentability	S&G – 2, 4 STRAT – 3, 5	This VC decision criterion is assumed to infer a required lack of competition, which is directly addressed via the position perspective, the concept of isolating mechanisms, as well as the principle of information asymmetry and the associated lack of readily available knowledge that inhibits effective competition.
Unique Selling Proposition	S&G – 2, 4 STRAT – 2	The respective requirements address this VC preference, as the frameworks require the firm to

VC Decision Criteria	Applicable Requirement	Motivation
		explore the customer perspective and provide a product or service to match an unmet need. The uniqueness of the offering is demonstrated by the presence of information asymmetry related to the need and ability to deliver value to the customer to address their unmet needs.
Market Volume	S&G – 1, 2, STRAT – 2, 3, 6, 7	With this VC preference relating to the size of the potential market and the firm's possible success due to the ability to service even only a small portion of the market, the criterion is addressed by the frameworks requiring the combination of the firm having to consider the blue ocean perspective and stipulate (1) its purpose and motivation for growth, and (2) identify a market opportunity, i.e., a stipulated motivation for growth would be erroneous if the market was small.
Market Growth	S&G – 2, 4, 9, 10 STRAT – 2, 3, 6, 7	The requirements and subsequent frameworks address this VC criterion related to sustained growth, which is usually a mechanism of the firm retaining its market share of a growing market, via the firm having to consider the blue ocean perspective and stipulate its growth purpose and motivation in light of a market opportunity, with the addition of having to justify how the firm will identify new opportunities and exploit its internal resources.
Market Acceptance	S&G – 3, 6, 7 STRAT – 2,3	This VC preference for rapid adoption of the product or service and the associated business success is addressed via the frameworks requiring the firm to review its cognitive model and justify the legitimacy of the offering, its knowledge related to the market, the customer and the firm's external context.
Fit to investment strategy	None	
Return on investment	None	
Exit possibilities	None	

The comparison in the matrix reveals that VC decision criteria are aligned with the dominant elements that support SME survival and growth and successful strategies, namely a motivation to achieve growth, coupled with a measure of knowledge and access to resources regarding how to institute an internal ability to execute upon a considerable external opportunity via a compelling client offering in a way that limits competition.

The comparison also reveals that VC decision criteria are not concerned with the process of strategy formulation, i.e., the necessity for the process to contain certain procedural elements (STRAT – 1, 8, 9, 10, 11). Similarly, the elements that support SME survival and growth as well as successful strategy formation are independent of firm-specific financial criteria desired by VC, i.e., their firm-specific financial characteristics regarding returns etc.

6.3.2.4 Research Sub-Question

The findings from comparing the VC decision criteria against the successful strategy criteria allow the dissertation to answer the final remaining sub-research question and achieve the associated sub-research objective develop in Section 1.5, set out in Table 46 below for ease of reference.

Table 46 - SRQ12 and SRO12

CODE	Research Question	CODE	Objective/Solution
SRQ12	How are VC decision criteria aligned with the factors that influence SME survival and growth as well as successful strategies?	SRO12	Understand the alignment of VC decision criteria to the factors that influence SME survival and growth as well as successful strategies?

The review reveals that high level VC decision criteria as proposed by Kollmann and Kuckertz (2010) and confirmed by Visagie (2011), Narayansamy, et al., (2012) and Šarić (2015) largely capture the elements associated with the survival and growth of SMEs. However, it has to be noted that in the review the author may be wrongfully justifying the connection between the requirements derived from theory and the VC decision criteria.

For example, market adoption is an outcome of legitimacy, i.e., of the ability of the firm to transfer knowledge to the market and the market's subsequent recognition of the value of the offering and appropriateness of the business form. However, it is unclear whether venture capitalists are aware of this connection, or rather whether they understand that market adoption is associated with business success, as it signals a market need and is necessary for revenue generation.

To improve alignment between the framework as a practical tool and the VC decision criteria, the framework will need to explain to the user(s) the VC decision criteria, which are currently captured under a different designation or a combination of elements. For instance, leadership is aligned with the requirements of having to address management knowledge as a success factor.

6.3.3 Step 4 – Creating Sub-categories

Having established the high-level connections between the requirements associated with SME survival and growth, strategy formulation and VC decision criteria, and given the objective and scope of the study, the dissertation will now develop upon the strategy formulation framework at increasing levels of detail in accordance with the framework development methodology presented in Figure 38, and the extract illustrated in Figure 46 below, by considering all of the functional requirements.

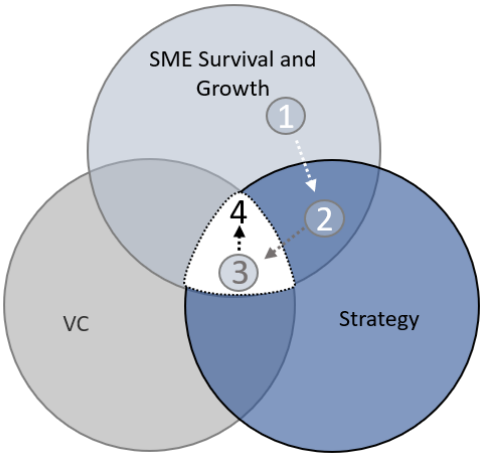


Figure 46 - Framework Development Process Extract

Although the dissertation will not develop upon the SME survival and growth framework, given the scope of the study, the requirement associated with strategy as practice (F12) dictates that successful strategies emerge from an understanding of the elements of survival and growth, the interplay between the intentional and emergent strategy loops and how strategy formulation brings about strategic fit.

Therefore, the strategy formulation framework will draw upon the SME survival and growth framework and its associated requirements, with the process of developing the strategy formulation framework being a re-iteration of steps 1-4 of the concept mapping methodology (see Section 6.2.2). This is initiated by grouping together all of the functional requirements according to the high-level categories, before considering sub-categories of understanding at increasing levels of detail.

Once more it is recognised that this process excludes the user requirements, boundary conditions and the design restrictions from the categorisation process, because they are conceptual in nature and are applicable to the framework as a practical tool as a whole. However, these design considerations will not be excluded as they will verified against the framework in Chapter 7, according to the concept mapping and research methodology.

6.3.4.1 Framework Phases

Having established the subjective nature of action research in Section 2.4, it is understood that the categorisation of the framework's requirements is subjective and that the construct is one way in which the requirements can be systematically grouped in order to achieve the research objective.

Establishing the framework phases consisted of:

1. Grouping together the original strategy formulation framework elements, according to the 4 strategy dimensions identified in Chapter 4,
2. Recognising the need for knowledge requiring explicit recognition as an independent grouping, and

3. Consolidating each group according to a unifying question word and an associated sub-function objective.

Accordingly, on reviewing the high-level strategy formulation framework and the associated requirements, it became evident that the requirements could be grouped according to the 4 strategy dimensions, namely process, context (internal and external), purpose and content, as illustrated in Figure 47.

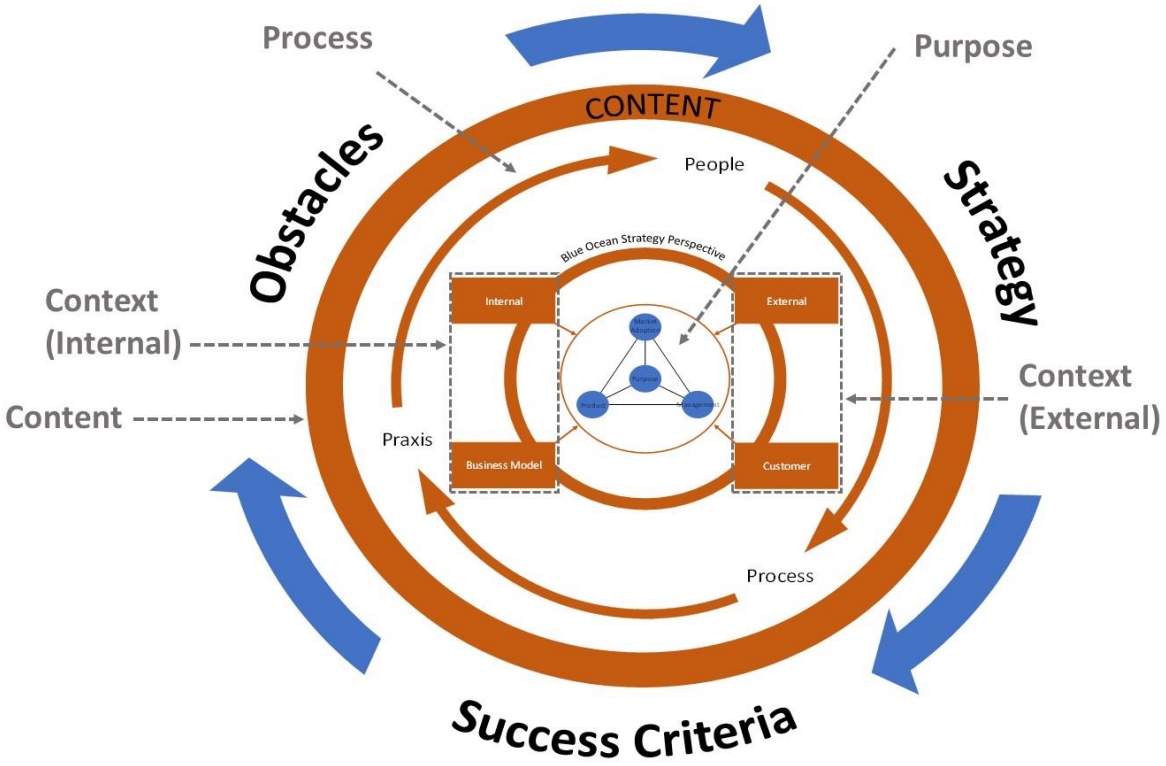


Figure 47 - Categorisation of Strategy Dimensions

However, with the inclusion of the functional requirements associated with SME survival and growth, it also became evident that a single theme in the form of knowledge required explicit independent recognition, due to (1) its importance as the underlying DNA, which lies at the core and binds the firm together, (2) the recognition of its value, absorption and creation, resulting in the survival and growth of SMEs, and (3) the theme creating a critical feedback loop with regard to challenging the firm's purpose and cognitive model. Therefore it was decided that knowledge would be assigned its own grouping.

Re-examining the groupings brought to light that each of the dimensions (internal and external context, purpose and content), including knowledge and other than process, corresponded to one or more question words and an associated sub-function objective in terms of the strategy formulation process illustrated in Table 47 below. As a result, the dissertation argues that these question words and sub-function objectives effectively make up the phases of the strategy formulation process framework, with the process dimension being applicable to the framework as a whole.

Table 47 - Framework Phase Questions & Sub-function Objectives

Question	Sub-function Objective
Why are we doing this?	Develop a sense of purpose.
Who will we target?	Identify an opportunity within the current and future external context of the firm.
How will we execute?	Review the internal context of the firm and assess the current and future means to exploit opportunities.
When will we know?	Question the firm's cognitive model and how it will be validated and modified in the future.
What will we do?	Bring about short-term action and goals for future review.

Table 48 below illustrates the grouping of the functional requirements according to the appropriate question word(s) and associated sub-function objectives.

Table 48 - Requirement Framework Phase Categorisation

ID	Design Consideration	Why	Who	How	When	What
F1	The use of the framework should lead to an improved understanding of the factors that affect SME survival and growth and the development of strategy in support of increasing the firm's chances of success.	x	x	x	x	X
F2	The framework will require the user(s) to state their motivation for growth and willingness to engage in entrepreneurial actions.	x				
F3	The framework will require the user(s) to identify and justify the information asymmetry about the		x			

ID	Design Consideration	Why	Who	How	When	What
	market opportunity from a demand and supply (transaction cost) perspective.					
F4	The framework will require the user(s) to identify the means to transfer knowledge to the right customers as to the benefits and legitimacy of the offering.			x		
F5	The framework will require the user(s) to identify the information asymmetry and required success criteria relating to execution of the opportunity.			x		
F6	The framework will require the user(s) to identify risk reduction strategies to overcome risks and resource shortcomings and evaluate under which circumstances these strategies will fail.			x		
F7	The framework will require the user(s) to identify the means of demonstrating the legitimacy of the opportunity and the firm to internal and external stakeholders.			x		
F8	The framework will require the user(s) to identify how they can justify their knowledge or beliefs related to an existing opportunity, and how they will be able to identify new information related to their knowledge set and modify it accordingly.				x	
F9	The framework will require the user(s) to identify future obstacles as the business grows, and to understand as well as decide how and when they will address them.			x		
F10	The framework will require the user(s) to identify how they will identify new knowledge related to new opportunities.				x	
F11	The framework will require the user(s) to identify how they will exploit their resource base to pursue new opportunities.			x		
F12	The framework will need to illustrate the elements of successful strategy formulation and allow the user(s) to understand the interplay between formal strategy formulation and emergent	x				

ID	Design Consideration	Why	Who	How	When	What
	strategy realisation against the backdrop of the factors that affect SME survival and growth.					
F13	The framework will require the user(s) to explore and define their understanding of the customer context and identify the customers' current and future and what may be unknown core needs.		x			
F14	The framework will require the user(s) to explore and define their understanding of the firm's external context and identify alternate existing and future success potentials with favourable strategic characteristics now or pursuant to the implementation of isolating mechanisms.		x			
F15	The framework will require the user(s) to explore and define their understanding of the firm's internal context and assess the alternate means to reduce, negate or recombine the partners, resources, capabilities and competencies as internal success criteria to effect current and future operational excellence in light of the success potentials.			x		
F16	The framework will require the user(s) to map the micro elements of the business model and isolating mechanism(s) in light of the intended offering, strategy and competitors on a suitable, easily communicable canvas.			x		
F17	The framework will require the user(s) to align the intended strategy with the paradigms of blue ocean strategy.		x	x		
F18	The framework will require the user(s) to develop a sense of purpose by developing a suitable mission and vision statement that may be reviewed throughout the process.	x				
F19	The framework will require the user(s) charged with executing the strategy to develop short- and medium-term objectives for future review.					x
F20	The framework will require the user(s) to develop a visual and effective means of communicating the	x	x	x	x	x

ID	Design Consideration	Why	Who	How	When	What
	strategy content in support of successful strategy implementation.					
F21	The framework as a continuous tool will require user(s) to assess and review the success of the strategy against the objectives and require them to answer whether they are not only 'doing things right', but are also 'doing the right things'.				x	
F22	The resulting framework should ascribe to and support the success criteria as derived by Lofving, et al., (2013).	x	x	x	x	x
F23	The framework should be aligned with the venture capital decision criteria favoured by investors and the concept that venture capitalists prefer characteristics inversely associated with risk.	x	x	x	x	x
F24	The framework should support its continued use.	x	x	x	x	x
F25	The framework should suggest tools that assist the user(s) in addressing the questions posed by the framework and achieving its objectives.	x	x	x	x	x

The dissertation proposes that the sequence of the phases and associated question words be determined in alignment with the strategic sequence as proposed by the blue ocean strategy perspective and the following rationale:

1. **Why:** The strategy process initiates by starting with 'why'. The question 'why' serves as a primer in the process by providing its motivation from the outset, i.e., asking the user(s) to determine why they are there and what they want to achieve.
2. **Who:** The framework does not favour the positioning or external perspective over the resource based view; rather it is understood that the firm's resources and associated knowledge provide the frame within which individuals seek opportunities; in other words, establishing an opportunity by asking 'who' is a precursor to determining 'how'. This rationale is in alignment with the blue ocean perspective in that the firm needs to determine a compelling offering prior to establishing whether it can be delivered upon.

3. **How:** Having identified a possible opportunity with regard to 'who', the firm has to determine the means of 'how' to effectively execute upon the opportunity. The blue ocean perspective also affects 'how' by proposing that firms should reduce the resources required to deliver value and build execution into the strategy.
4. **When:** Given possible limited absorptive capacity, and prior to engaging in action, in other words 'what', it is important to consider the goal of the exercise, i.e., to seek truth, to learn, to create knowledge and to establish associated performance criteria as to 'when' certain information will be considered valid and truthful.
5. **What:** With the strategy formation process being continual, future reviews related to performance in terms of 'when' require the user(s) to measure an outcome initiated by an action.

Although the framework presents a sequence or process, the strategy formation process is part of an adaptive complex system and therefore is dynamic and needs to support adaptation. Such adaptation is brought about by learning, which involves the correction of an error (Blackman, et al., 2004). Therefore, although a sequence is presented, the user(s) may wish to and should revisit earlier phases. This is known as double-loop learning, which allows a system to modify or reject previous assumptions in light of new information, in contrast to single loop learning, where previous outcomes remain absolute (Bendell, 2014).

Illustrated in Figure 48 are the phases of the strategy formulation process framework, within the intentional strategy loop as envisioned by the dissertation: the phases take into account the functional requirements, the strategy dimensions, knowledge as the binding DNA of the firm, and the sequence proposed by the blue ocean strategy perspective.

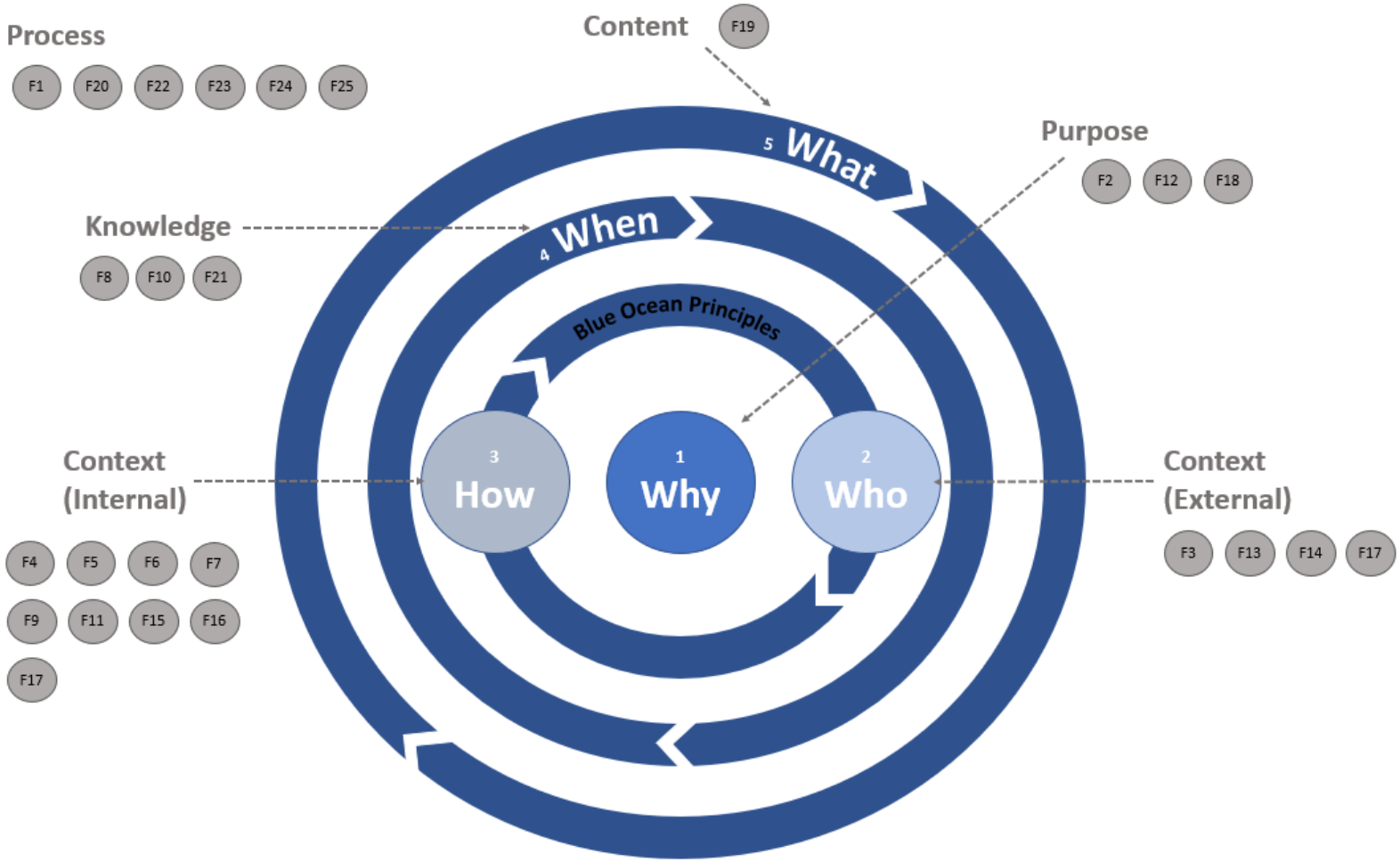


Figure 48 - Strategy Formulation Framework Phases

6.3.4.2 Framework Sub-Categories

The purpose of identifying sub-categories is to derive connections at increasing levels of detail in the hope of increasing understanding as to the elements that interact within each phase.

In accordance with the method of concept mapping, a more focused review of the requirements brought to light further sub-categories (stages) associated with the phases of 'why, who and how'. These sub-categories were derived by identifying clusters of requirements and identifying central themes associated with each cluster. Although the phases of 'when and what' were also reviewed, no clear sub-category or stage was identified. However, the review did increase the study's understanding of the underlying purpose and interacting elements within each phase. Evaluating the cluster of requirements within the respective stage or phase, in the case of 'when' and 'what', allows the dissertation to formulate a summary requirement, objective, key considerations, frameworks questions and tools to guide the user(s).

It should be noted that these tools are not prescriptive; rather, the goal was to propose tools that meet the framework requirements and elicit the necessary interactions between the users, and that could produce knowledge to answer the questions captured within the stage or phase. It is simply impossible to review all the tools that would achieve this goal in order to suggest the best tool. Therefore, an exhaustive review of the tools available was not carried out, but rather the author proposes tools that he is familiar with and that he believes could achieve the goal as discussed. It is entirely conceivable that tools exist, which are better suited to developing the knowledge associated with each framework question. However, given that the framework is not prescriptive, the facilitator or framework user(s) are free to substitute the tools. In order to minimise the risk of using less effective tools, the validation process allowed for the feedback from domain experts and user(s) in order to ascertain whether more suitable tools did exist. If so, the dissertation could consider replacing the proposed tools with those suggested.

6.3.4.2.1 WHY

Reviewing the requirements, the dissertation proposes the goal of this phase is to bring about understanding and establish a sense of purpose which initiates and guides not only the process but future decision making. The goal of the phase is achieved by reviewing the purpose within three stages (sub-categories) from a process, individual, and firm perspective according to the requirement categorisation in Table 49 and discussed below.

Table 49 - 'Why' Phase Requirement Categorisation

Design Consideration	Process	Individual	Firm
F1 - The use of the framework should lead to an improved understanding of the factors that affect SME survival and growth and the development of strategy in support of increasing the firm's chances of success.	x		
F2 - The framework will require the user(s) to state their motivation for growth and their willingness to engage in entrepreneurial actions.		x	
F12 - The framework will need to illustrate the elements of successful strategy formulation and allow the participants to understand the interplay between formal strategy formulation and emergent strategy realisation against the backdrop of the factors that affect SME survival and growth.	x		
F18 - The framework will require the user(s) to develop a sense of purpose through the development of suitable mission and vision statements.			x
F20 - The framework will require the user(s) to develop a visual and effective means of communicating the strategy content in support of successful strategy implementation.			x
F22 - The resulting framework should ascribe to and support the success criteria as derived by Lofving, et al., (2013).	x	x	x
F23 - The framework should communicate the venture capital decision criteria favoured by investors in order to facilitate alignment and assist the user(s) in addressing investor concerns.	x	x	x
F24 - The framework should support its continued use.	x	x	x

Design Consideration	Process	Individual	Firm
F25 - The framework should suggest tools that assist the user(s) in addressing the questions posed by the framework and achieving its objectives.	x	x	x

The sequence of the phases of (1) process, (2) individual and (3) firm was determined according to the rationale that the user(s) would first require an understanding of the purpose of the strategy formulation process before considering their own and then the company's context in accordance with the layers of strategy context discussed in Chapter 4.

PROCESS

Requirement Summary: The framework needs to develop an understanding among the user(s) regarding the purpose of the process, and the elements that affect the success of the process and the firm.

Objective: Obtain the necessary buy-in from the users to utilise the framework and understand the elements that will determine the process and improve the firm's chances of success.

Tools: In order to assist with this objective, the framework will explain the theoretical underpinnings of the process by using a suitable metaphor and graphical illustrations.

Key Considerations: SMEs have employees with differing levels of education and therefore the explanation, metaphor and graphics should be understood by and resonate with all the parties.

Framework questions:

1. Do you understand the role of the process and the elements that affect SME survival and growth?
2. Do you believe the right people who need to implement the strategy are present to help formulate it?

3. Do you understand the decision criteria that are reviewed by venture capitalists?

INDIVIDUAL

Requirement Summary: The framework needs to establish the motivation of the user(s) to engage in entrepreneurial activities and achieve a level of growth.

Objective: Determine the level of motivation amongst the users, as this will affect the scale of the opportunities sought.

Tools: The author proposes that the various users share their personal journeys to date and their motivation for working towards a future.

Key Consideration: Not all entrepreneurs and management wish to achieve considerable growth and sacrifice their work life balance or their control over the firm. However, the elements of the framework are applicable to all SMEs that wish to survive and thrive, and therefore its use remains relevant beyond this stage.

Framework Questions:

1. What do you wish to achieve for the firm and yourself?
2. Do you consider yourself as suitable for VC (external funding) and other forms of partnerships requiring the firm to be responsible and report to third parties?

FIRM

Requirement Summary: The framework will need to assist the users in formulating an understanding of the firm's vision and mission, which will guide the process; this may be revisited during the process.

Objective: Set a general direction that will focus ideas to prevent analysis paralysis and guide future decision making.

Tools: The author proposes utilising brainstorming as a group activity to first develop and later filter ideas regarding the mission and vision of the firm.

Key Consideration: The mission and vision statement should ascribe to the characteristics of Ackoff (1986) and Lynch (2000), i.e., it should define the business the firm wishes to be in, enable the firm to form objectives, reflect the beliefs of the firm, and summarise the competitive advantage of the business, and it must be relevant to internal and external stakeholders.

Key Framework Questions:

1. What is the business the firm wishes to be in?
2. How is the firm different from rivals?
3. What should the perception of the firm be from the perspectives of internal and external stakeholders?

6.3.4.2.2 WHO

According to the high-level categorisation, the purpose of this phase is to identify an opportunity by identifying a core unmet customer need with favourable strategic qualities, while taking into consideration the external context with regard to the impact of competition, future macro-economic scenarios and the industry rules and context. Categorising the functional requirements associated with the phase (Table 50 below) brought to light three stages (sub-categories), with the principles of blue ocean strategy being prevalent within each sub-category.

Table 50 - 'Who' Phase Requirement Categorisation

Design Consideration	Core Unmet Need	Competition	Future Scenarios
F1 - The use of the framework should lead to an improved understanding of the factors that affect SME survival and growth and the development of strategy in support of increasing the firm's chances of success.	x	x	x

Design Consideration	Core Unmet Need	Competition	Future Scenarios
F3 - The framework will require the user(s) to identify and justify the information asymmetry about the market opportunity.	x	x	x
F13 - The framework will require the user(s) to explore and define their understanding of the customer context and identify the customers' current and future needs, and what may be unknown core needs.	x	x	x
F14 - The framework will require the user(s) to explore and define their understanding of the firm's external context and identify alternate existing and future success potentials with favourable strategic characteristics both now and pursuant to the implementation of isolating mechanisms.		x	
F17 - The framework will require the user(s) to align the intended strategy with the paradigms of blue ocean strategy.	x	x	
F20 - The framework will require the user(s) to develop a visual and effective means of communicating the strategy content in support of successful strategy implementation.	x	x	x
F22 - The resulting framework should ascribe to and support the success criteria as derived by Lofving, et al., (2013).	x	x	x
F23 - The framework should communicate the venture capital decision criteria favoured by investors in order to facilitate alignment and assist the user(s) in addressing investor concerns.	x	x	x
F24 - The framework should support its continued use.	x	x	x
F25 - The framework should suggest tools that assist the user(s) in addressing the questions posed by the framework and achieving its objectives.	x	x	x

The sequence of the phases was guided by the blue ocean strategy sequence, in that the firm first needs to identify an unmet market need that could result in commercial success, before considering competition, which will affect the firm's ability to deliver the product or service at the correct price; finally it needs to consider whether future scenarios will either affect the firm's ability or that of competitors to service the customers' needs.

CORE UNMET NEED

Requirement Summary: The framework needs to assist users in identifying a core unmet need and value proposition, while taking into account the industry rules and context.

Objective: Identify a core unmet need and value proposition for the customer.

Tools: The author proposes using one or more of the following tools:

- Customer Empathy Map: As a visual tool, the customer empathy map can be used in a group setting by asking the user(s) to imagine conceptually what the intended customer feels and experiences (Osterwalder & Pigneur, 2009, p. 130) Creator: XPLANE.
- Customer Need Saturation Scale: As the name suggests, the customer need saturation scale is used to rate the extent to which the identified customer need is currently being fulfilled in the market (its saturation). Based on this, it is then possible to determine the generic competitive action that would be the most suited to the business (Ungerer, 2016).
- Customer Journey Map: A customer journey map is a visual representation of the customers' processes, needs and perceptions, as they interact with the industry, product or service throughout its life cycle. By mapping the customer's journey the user attempts to identify underserviced areas or misperceptions regarding the client's need.

Key Considerations: According to the blue ocean perspective, the users need to identify a core unmet need rather than inferring their needs from current offerings or providing minor differentiation points. The core unmet need may not necessarily vest with the decision maker regarding the acquisition of the product or service.

Key Framework Questions:

1. What are the engrained rules of the industry?
2. Who is an underserviced customer?

3. Who is the decision maker and who is the customer?
4. Does the intended customer pool and its growth present a significant opportunity to encourage mutually beneficial partnerships with third parties who can provide access to resources?

COMPETITION

Requirement Summary: The framework needs to assist the users in identifying and assessing the elements upon which the industry competes.

Objective: Identify a favourable competitive environment.

Tools: The author proposes using one or more of the following tools:

- Strategy Canvas: A strategy canvass reviews the elements upon which industry participants compete along the customer journey with the intent of identifying a diverging value proposition.
- SWOT Analysis: A SWOT analysis requires the users to assess the strengths, weaknesses, opportunities and threats of industry participants in order to identify a competitive advantage.

Key Considerations: According to the blue ocean strategy perspective, firms need to reduce the number of elements upon which they compete by identifying a diverging value proposition that makes the competition irrelevant. For new industries or markets that do not yet exist, users will not be able to refer to actual competition, but will have to assess conceptual competitors.

Key Framework Questions:

1. Who is or will be the firm's competitors?
2. What are the elements upon which firms currently compete?
3. How can the firm diverge from the industry norm?
4. What does the firm know that competitors do not?

5. Under what conditions will competitors be unable to compete with the firm?

FUTURE SCENARIOS

Requirement Summary: The framework has to assist the users in exploring the impact that future scenarios may have on the customer and industry.

Objective: Understand how future scenarios may affect the customer and industry.

Tools: The author proposes using one of more of the following tools:

- PEST analysis: A PEST analysis is well-known tool that is used by consultants and facilitators to assess the possible impact of future macro-economic scenarios on the environment, which hosts the intended customer or industry. PEST is an acronym that stands for the Political, Economic, Social and Technological factors, which need to be considered. More recently, advocates have proposed that Legal and Environmental factors need to be considered too, but this is at the discretion of the facilitator.
- Industry Life Cycle Map: The users can assess the context of the industry against the industry life cycle map in order to assess the future competitive environment (Grant, 2010, p. 277).

Key Considerations: Although the users are asked to assess the effect of external factors on the firm, they should focus on the internal factors influenced by the scenarios over which they have control.

Framework Questions:

1. What impact may future scenarios have on the industry and the firm?
2. What are the internal elements of the firm that will be affected by the external scenarios?

6.3.4.2.3 How

The dissertation proposed that the purpose of this phase is to determine the success factors associated with delivering value to the customer, as well as the possible obstacles and resource shortcomings facing the firm and the possible ways of overcoming these shortcomings and risks through suitable strategies. Categorising the functional requirements associated with the phase, as summarised in Table 51, highlighted a number of stages (sub-categories), with the principles of blue ocean strategy being prevalent within this phase.

Table 51 - 'How' Phase Requirement Categorisation

Design Consideration	Core Competency	Business Model	Legitimacy	Growth Stage
F1 - The use of the framework should lead to an improved understanding of the factors that affect SME survival and growth and the development of strategy in support of increasing the firm's chances of success.	x	x	x	x
F4 - The framework will require the users to identify the means to transfer knowledge to the right customers with regard to the benefits and legitimacy of the offering.			x	
F5 - The framework will require the users to identify the information asymmetry related to execution of the opportunity.		x		
F6 - The framework will require the users to identify risk reduction strategies to overcome risks and resource shortcomings, and to evaluate under which circumstances these strategies will fail.		x		
F7 - The framework will require the users to identify the means of demonstrating the legitimacy of the opportunity and the firm to internal and external stakeholders.			x	
F9 - The framework will require the users to identify future obstacles as the business grows, and to determine how and when they will address them.				x

Design Consideration	Core Competency	Business Model	Legitimacy	Growth Stage
F11 - The framework will require the users to identify how they will exploit their resource base and the various growth modes to pursue new opportunities.	x			
F15 - The framework will require the users to explore and define their understanding of the firm's internal context and assess the alternate means to reduce, negate or recombine the partners, resources, capabilities and competencies as internal success criteria to effect current and future operational excellence in light of the success potentials.		x		
F16 - The framework will require the users to map the micro elements of the business model and isolating mechanism(s) in light of the intended offering, strategy and competitors on a suitable, easily communicable canvas.		x		
F17 - The framework will require the users to align the intended strategy with the paradigms of blue ocean strategy.	x	x		
F20 - The framework will require the users to develop a visual and effective means of communicating the strategy content in support of successful strategy implementation.	x	x	x	x
F22 - The resulting framework should ascribe to and support the success criteria as derived by Lofving, et al., (2013).	x	x	x	x
F23 - The framework should communicate the venture capital decision criteria favoured by investors in order to facilitate alignment and assist the users in addressing investor concerns.	x	x	x	x
F24 - The framework should support its continued use.	x	x	x	x

Design Consideration	Core Competency	Business Model	Legitimacy	Growth Stage
F25 - The framework should suggest tools that assist the users in addressing the questions posed by the framework and achieving its objectives.	x	x	x	x

The sequence of the stages is a function of the dissertations belief that the firm would first need to determine its core competency before considering the micro-element (business model), which will support its operational differentiation point. Only then will the users need to determine whether additional business model elements would be required to demonstrate legitimacy of the offering and the business form before considering the prioritisation of when the various elements would be required in accordance with the firm's growth stage.

CORE COMPETENCIES

Requirement Summary: The framework will need the users to state their 'core competency(ies)', which will differentiate the firm from competitors over time.

Objective: Identify the core competency the firm will develop as a competitive advantage.

Tools: The author proposes that the users brainstorm against the backdrop of the resource pyramid of value creation as proposed by Brush, et al., (2001, p. 68) to identify the core competencies that will differentiate the firm.

Key Considerations: The process of creating and committing to a core competency requires the users to consider not 'what' the company does, but 'how' it does it; this should be a competitive advantage in a range of product and market categories, thus allowing the firm to exploit new opportunities and compete in new business areas.

Key Framework Questions:

1. What do we know about the core process of delivering value that our competitors do not?
2. Is this core process applicable to future opportunities and markets?
3. How can the firm exploit the core process to pursue future opportunities and markets?

BUSINESS MODEL

Requirement Summary: The framework will need to assist the users in mapping their business model.

Objective: Establish the key success criteria associated with the intended offering and the means to overcome resource shortages and obstacles.

Tools: The author proposes utilising a business model canvas (Osterwalder, 2009) as a means to brainstorm the success factors associated with delivering value and obtaining VC, and subsequently reviewing resource shortages and obstacles and various means to overcome them.

Key Considerations: In accordance with the blue ocean strategy perspective, the users will need to assess how they can reduce the resource requirements and hence the costs associated with delivering value to the customer, as well as how to build execution into the strategy, i.e., the process of delivering value.

Key Framework Questions:

1. What are the success factors associated with delivering the intended value to the customer from a market, management and operational perspective?
2. What are the resource shortages and obstacles associated with the business model?
3. How can the firm negate or reduce the resource shortcomings and obstacles?
4. Under which circumstances will the measures in (3) increase the firm's risk of failure?
5. What is the isolating mechanism of the business model?
6. How can you ensure execution of the strategy via the business model?

LEGITIMACY

Requirement Summary: The framework will need to assist the users in identifying how the firm will establish its legitimacy against industry norms and practices.

Objective: Identify the means to demonstrate the legitimacy of the firm's offering and institutional form to internal and external stakeholders, including possible venture capitalists.

Tools: The author proposes a brainstorming session during which users review the industry norms and practices revealed in the 'who' phase and ideate various means to establish the legitimacy of the firm and its offering.

Key Considerations: In an effort to establish legitimacy, the users will need to assess the object of legitimacy, i.e., the activity, the offering of the firm, etc., the audience evaluating such legitimacy (including venture capitalists) and the purpose of achieving legitimacy.

Key Framework Questions:

1. What is the object of legitimacy?
2. Who is the audience reviewing the legitimacy?
3. What is the purpose of the legitimacy?
4. How can the firm establish its legitimacy?

GROWTH STAGE

Requirement Summary: The framework will need to assist users in identifying future sources of failure and success associated with the growth process.

Objective: Identify future failure points and success criteria associated with growth.

Tools: The author proposes that the users brainstorm future sources of failure and associated success criteria against the backdrop of the Greiner Growth Curve (Greiner, 1998).

Key Considerations: The users need to recognise that firms do not evolve according to a predetermined set of stages, and they may draw inspiration from any of the stages proposed.

Key Framework Questions:

1. What issues will present themselves as the firm grows in the short term?
2. What can we do to address these issues?
3. When will we address these issues?

6.3.4.2.4 WHEN

The purpose of this phase is to question the firm's cognitive model and how it will be validated and modified in the future. By accordingly reviewing the requirements grouped within the phase, the following elements were developed.

Requirement Summary: The framework will need to induce the users to answer how they will determine if their knowledge is true and correct, and how they will recognise and accept new knowledge to modify their assumptions.

Objective: Continually develop more accurate information and knowledge in order to improve the strategic fit of the firm.

Tools: The author suggests that the users review the tools used to date and the core assumptions captured within each tool, and thereafter provide evidence or justify why they believe their knowledge to be true as well as to brainstorm what would be indications that these assumptions were incorrect or that new information is available.

Key Considerations: With the tool intended to be used on a periodic basis, the users will have to question and verify their assumptions continually in the pursuit of more accurate and new information.

Key Framework Questions:

1. What do you believe to be the key assumptions that underpin your theories related to the opportunity and its effective execution?
2. How can you be confident the assumptions are true and correct?
3. How will you be able to recognise that it is necessary to alter your assumptions?

6.3.4.2.5 WHAT

According to the original requirement grouping, the objective of this phase is to bring about short-term action and goals for future review. Further review of the requirements grouped within the phase revealed that the following elements need to be considered.

Requirement Summary: The framework will need to bring about actions that will realise the strategy and bring new information to light via future reviews.

Objective: Set in motion certain actions, which will drive the firm to realise the opportunity and provide a baseline from which the firm can review its assumptions.

Tools: The author proposes the use of an effort-impact matrix, whereby key assumptions are plotted to prioritise actions that will have the greatest impact on the strategy.

Key Considerations: The actions need to be developed by those who will implement them to ensure commitment. The actions need to have clear objectives and expectations, as well as an agreed timescale in order for periodic reviews and corrective actions if necessary.

Key Framework Questions:

1. Which actions will have the greatest impact on confirming your assumptions regarding the business model?
2. Who will do what by when to bring new information to light regarding these assumptions?
3. How will you explain the strategy to the relevant stakeholders in an easily communicable fashion?

6.3.4.3 The Cognitio Strategy Formulation Framework

As illustrated in Figure 50, the final strategy formulation framework is broken down into its constituent phases and stages, as developed by utilising the concept mapping methodology. The strategy formulation framework seeks to bring about the discovery of knowledge, the identification of opportunities and success factors, and the means to overcome obstacles within the intentional strategy loop.

In reviewing what works and what does not, as the strategy interacts with the firm's external environment, the process of strategy formation should improve the firm's strategic fit and hence the probability of its survival and success, according to the SME survival and growth framework. The framework as the output of this dissertation is presented in its entirety in Figure 51 as a combination of the SME survival and growth, strategy formation and strategy formulation sub-frameworks.

BEHIND THE NAME

cognition
/kɒgˈnɪʃ(ə)n/

Noun

Meaning: the mental action or process of acquiring knowledge and understanding through thought, experience, and the senses.

synonyms: perception, discernment, awareness, apprehension, learning, understanding, compr ehension, enlightenment, insight, intelligence, reason, reasoning, thinking, (consciou s) thought
"a theory of human cognition"

- a perception, sensation, idea, or intuition resulting from the process of cognition.

plural noun: cognitions

synonyms: perception, discernment, awareness, apprehension, learning, understanding, compr ehension, enlightenment, insight, intelligence, reason, reasoning, thinking, (conscio us) thought
"a theory of human cognition"

Figure 49 - Extract from Oxford Online English Dictionary

The framework's name was derived from the Latin word *'cognoscere'*, meaning 'to know or learn'. The Oxford English Dictionary defines 'cognition' as "the mental action or process of acquiring knowledge and understanding through thought, experience, and the senses". The author was unable to find a name that more aptly describes the intent of the framework in its goal of assisting its users to develop knowledge and understanding; this goal lies not only at the heart of the firm, but is the defining element that determines the development of successful strategies and subsequent SME survival and growth.

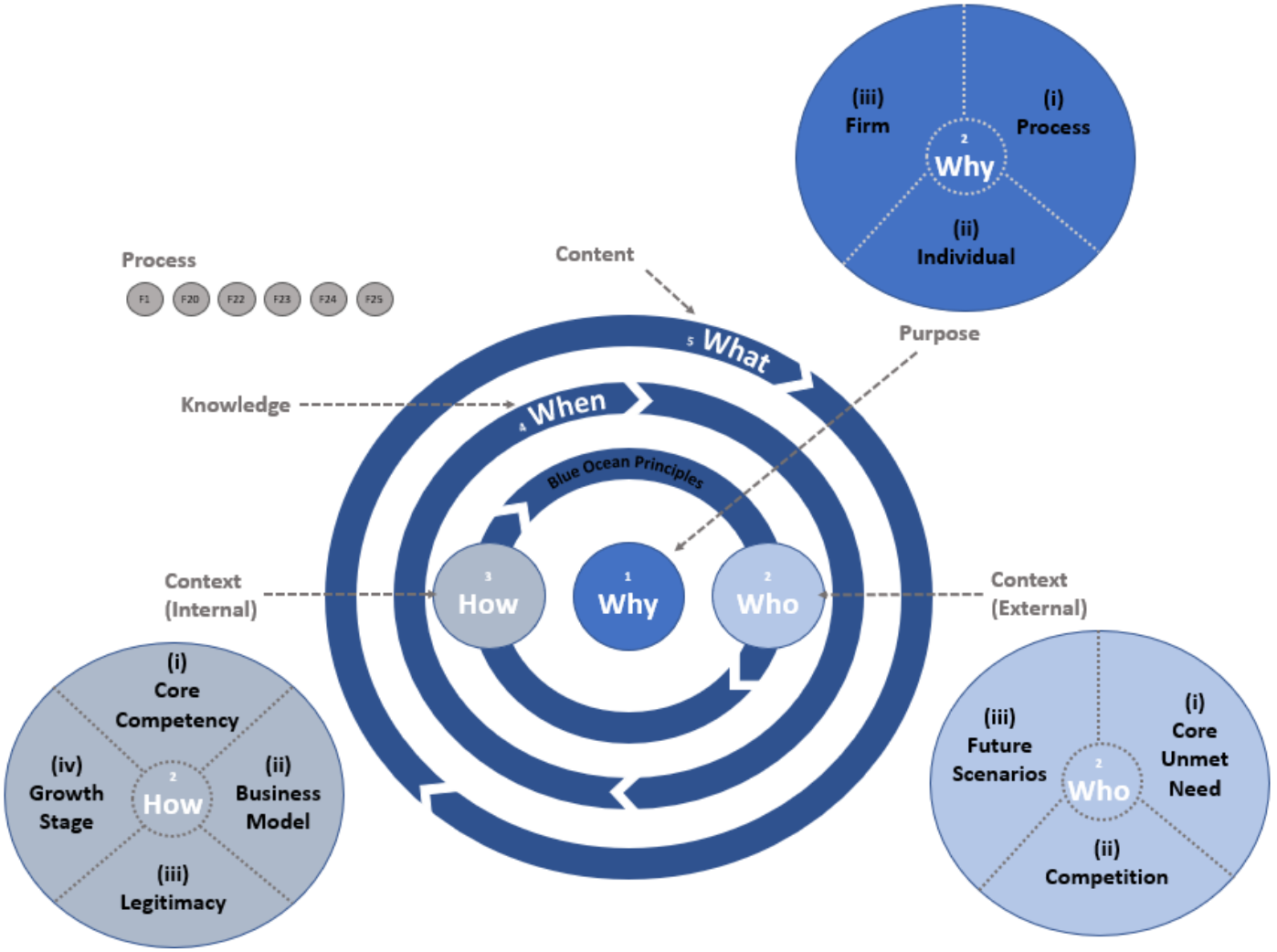


Figure 50 - Strategy Formulation Framework - Phases & Stages

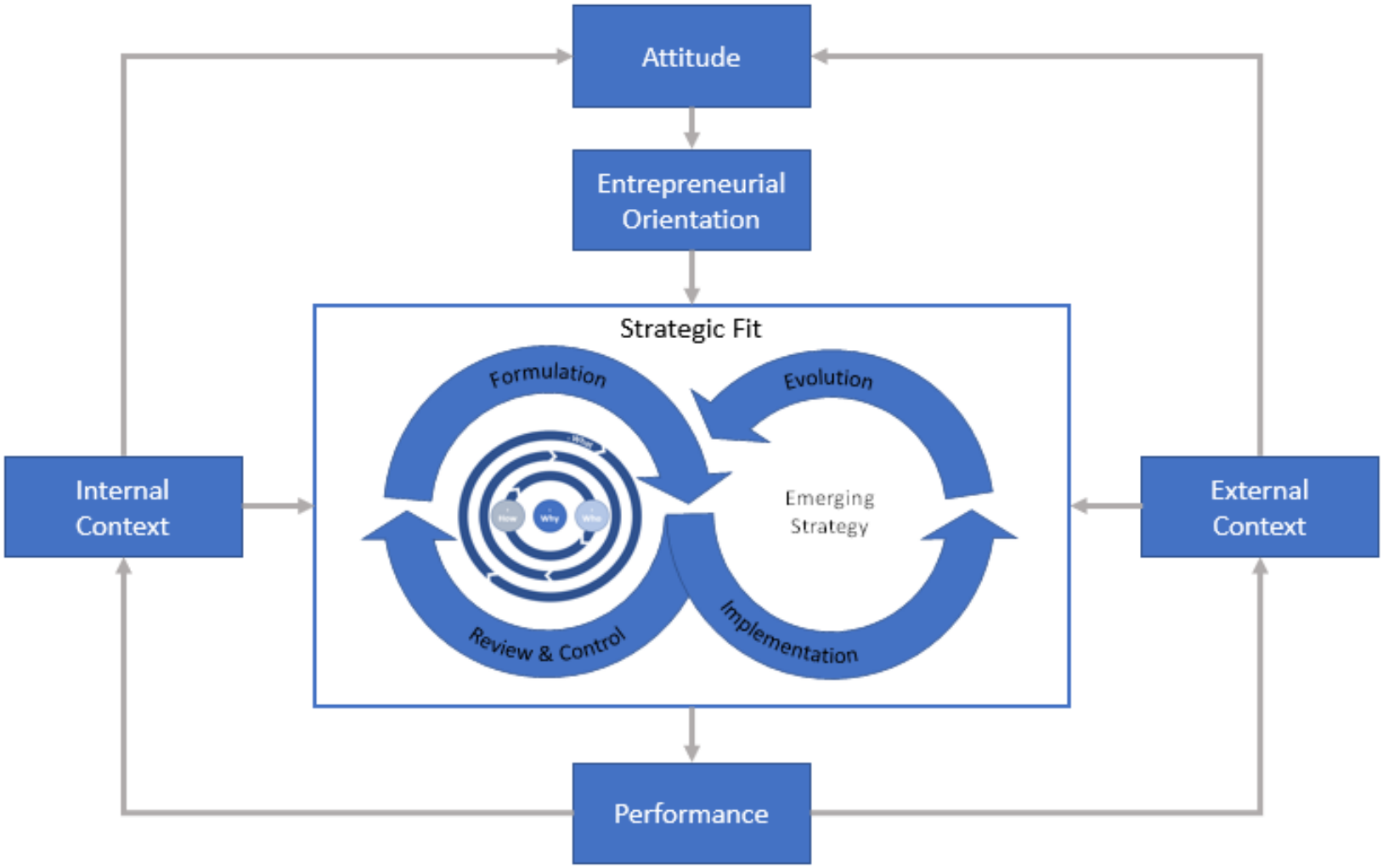


Figure 51 – Dissertation Cognition Framework

6.4 Practical Translation

The purpose of this section is to describe how the dissertation seeks to transfer the knowledge associated with the theoretical framework developed in Section 6.3.

6.4.1 Introduction

As a response to the validation process related to the sub-frameworks, to be reviewed in Chapter 7, which revealed that the theory encapsulated within the frameworks were still too technical, the practical framework endeavours to present the theoretical framework as developed in Section 6.3 above by means of a metaphor and graphical depictions. As was the case with the development of the theoretical framework, the practical framework progresses by representing the sub-frameworks of SME survival and growth, strategy formation and ultimately strategy formulation.

The first step provides the users with a wholistic view of the elements that affect strategic fit and therefore SME survival and growth. The second step prompts the users to consider the interplay between the formal and emergent strategy processes and the different strategy perspectives including business models, and to recognise the importance of instituting strategy as practice as a core competency in order to achieve strategic fit consistently. The third and final step presents the users with the phases and stages and their constituent considerations, which make up the strategy formulation process. See Appendix B-3 for the progression of the practical framework as presented to the ultimate users.

6.4.2 The Metaphor

In light of the need identified to communicate the theoretical findings and associated knowledge to non-domain experts, given that SME employees have varying degrees of education, the author decided to communicate the sub-frameworks and their theory by means of a metaphor prior to introducing the complete framework. The decision to utilise a metaphor is due to their ability to assist in developing a ‘frame’ or ‘framing’ of the subject matter for the users (Bateson, 1955).

The concept of a “frame” and “framing” refers to how individuals organise, perceive and communicate aspects of reality; it was first introduced by Bateson in (1955). Bateson proposed that a frame, by means of a verbal message, visuals, gestures and other modes of symbolisation, specifies the content and relationship between the various elements of an issue or topic so, that it may be more easily interpreted, understood and communicated. The frame is anchored by the cultural and cognitive categories of understanding, which guide and ground interpretation.

Building on the work of Bateson, Fillmore (1975, p. 124) defined a frame as a system of categories whose structure and understanding is rooted in cultural beliefs or mental models. As such a concept is rationalised and legitimised, if the frame successfully extends an existing category by means of an analogy or metaphor, or if it creates a new category of understanding. Legitimacy within the context of framing means ‘‘a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate with some socially constructed system of norms, beliefs and definitions’’ (Suchman, 1995, p. 574).

Consistent with the linguistic and cognitive sciences, analogies and metaphors are defined as statements of similarity regarding properties, attributes or underlying relationships between two specific domains. The difference between analogies and metaphors is that of degree: metaphors are concerned with an extended reach of comparison, for instance by linking business to sports or warfare, whereas analogies refer to cases and observations within the associated general business, market or industry context.

Within the process of strategic change and framing, authors provided evidence that metaphorical and analogical comparisons can guide thinking, create understanding and reduce uncertainty, which thus fosters social acceptance and support, allowing for further inferences to be made. According to Gioia (1986, p. 53) analogies and metaphors are useful in the context of change because they “convey relationships to concepts already understood… [and hence] facilitate the construction of meaning by the person or group experiencing them”.

Within the process of framing, analogies and metaphors provide much needed structure, which allows the stakeholders to derive understanding from what would otherwise be a complex situation. The structure allows the stakeholders to make inferences and derive links to action that are judged to be legitimate, as they garner social support for change by validating, discrediting and pre-empting the actions derived from the analogy or metaphor.

Cornellisen, et al., (2011) proposes four core metrics for the successful and appropriate use of analogies and metaphors:

1. Analogies are better suited to incremental changes to mental models, whereas metaphors are more appropriate when the users needs to create new categories of understanding.
2. Analogies and metaphors that allow for a depth of comparisons between the domains are considered more legitimate than those that rely on superficial common attributes.
3. Familiarity of the stakeholders with the analogy or metaphor used improves comprehension, reduces uncertainty and possible resistance to change, and such analogies and metaphors are thus judged to be more legitimate in the actions they infer.
4. The effectiveness of an analogy or metaphor is linked to the degree to which the proposed change is aligned with the motivations of the stakeholders, i.e., their interests and beliefs.

Taking into account the moderating factors above, the author explored a number of analogies and metaphors, and decided to communicate the framework through the use of a metaphor rather than an analogy, due to the extent of new categories of understanding that needed to be formed, and in order to allow the concepts to be applicable across a number of industries, rather than being limited to a close relationship, as inferred via an analogy.

With the assumption that the intended users would have a diverse background, the author decided that the concept of wilderness and survival would be familiar amongst the users and therefore appropriate to instilling the new concepts.

6.4.3 The Framework & Knowledge Transfer

In order to improve understanding of the framework, its use and the various theories captured within it, the framework is explained by means of graphics utilising the metaphor of survival in the wild, with accompanying text explaining the theories depicted in the graphics. Illustrated in Figure 52 is thus the relevant framework graphics accompanied by text in Figure 53.

The framework and metaphor would be explained to the users by means of a presentation (Appendix B-3), with the facilitator providing background and examples regarding its use. As illustrated in the Appendix B-3, the facilitator would progressively describe and introduce the theory before the unifying framework is presented. The facilitator would subsequently guide the users through the various phases and the proposed tools or their own tools, which will provide answers to the framework questions captured within each phase and stage.

Figures 52 through 55 explain 2 examples. The slides in Figure 52 and Figure 53 illustrate the concept of strategic fit in that survival is a function of the degree of adaptation and is based on knowledge. The facilitator would be able to explain to the framework users that the woman's chances of success regarding a good camping experience, despite the presence of funding and resources, would be limited, as she lacks knowledge regarding the best camping site and is poorly suited to the wilderness environment with regard to her outfit and equipment. In contrast, the wilderness guide has knowledge regarding favourable camping spots and, despite a lack of resources, is able to make do with what he has, due to his knowledge of his resources and ability to overcome obstacles.

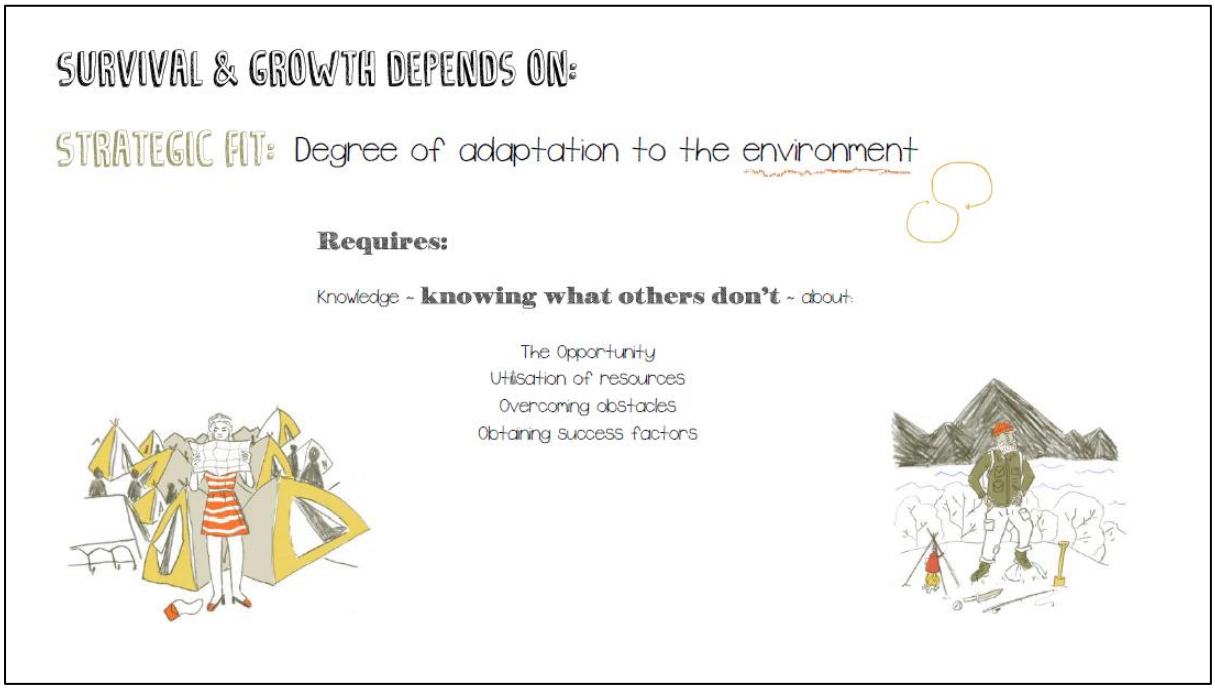


Figure 52 – Strategic Fit Presentation Graphics

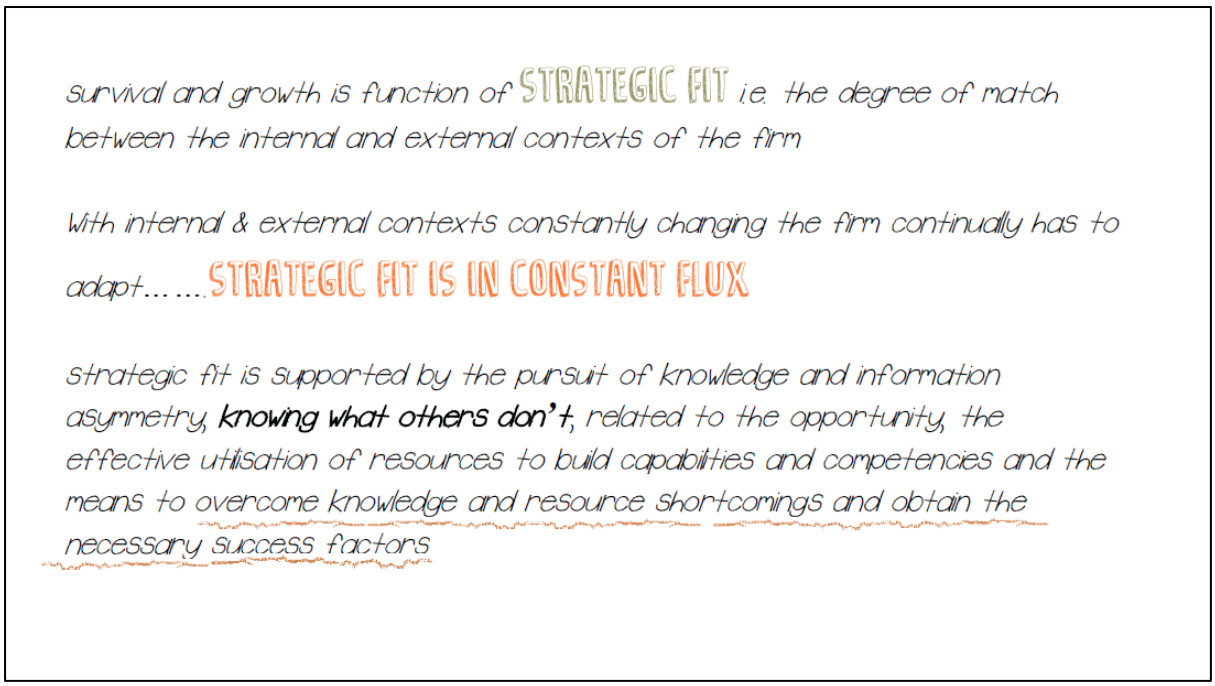


Figure 53 – Strategic Fit Framework Theoretical Explanation

The slides in Figure 54 and Figure 55 explain the concept of liability of newness. The depiction and accompanying explanation aims to bring about the understanding that survival is dependent on the attainment of knowledge. The depiction demonstrates that attaining knowledge via trial and error is fraught with danger, as is the case in business as assets become depleted and competition impacts upon on the business' ability to survive. The slides go on to present the concept of risk reduction strategies as a means to accelerate a reduction in risk i.e. obtaining assistance form a knowledgeable guide will increase your ability to carry out activities which will support your survival. However, these risk reduction strategies are not absolute as depicted in the guide catching fire.

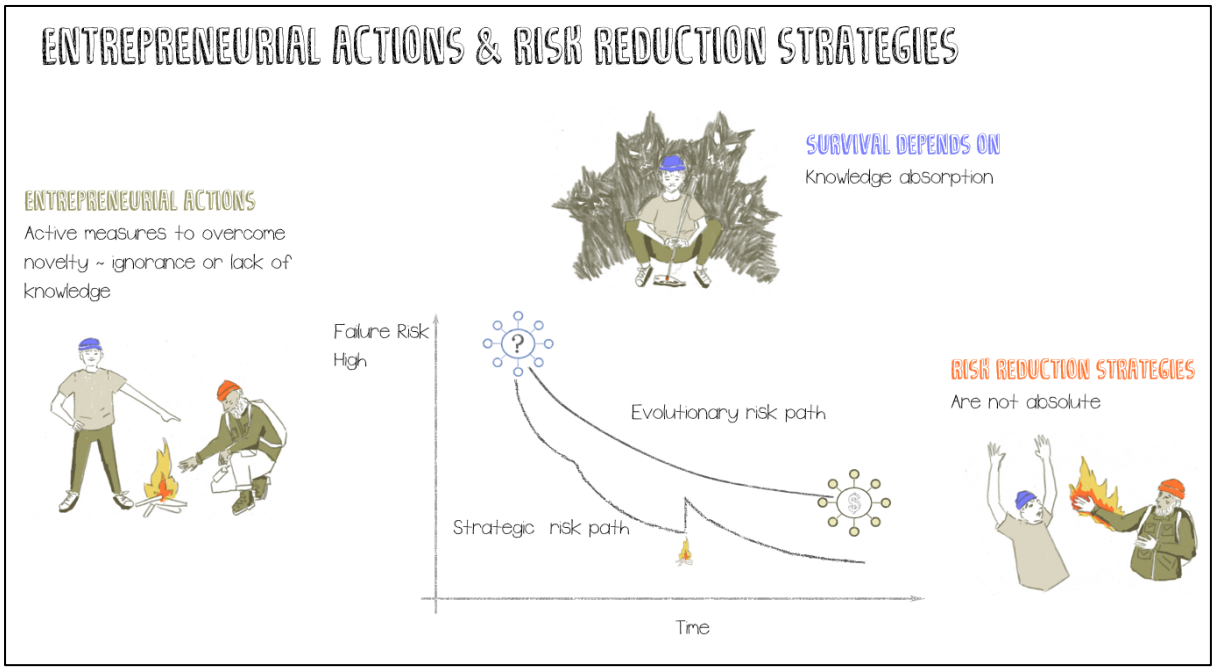


Figure 54 - Liability of Newness Framework Graphics

Figure 55 - Liability of Newness Theoretical Explanation

6.4.4 Practical Use of the Framework

As introduced in Section 6.4.1, the practical framework as a translation of the theoretical framework seeks to transfer the knowledge engrained within the theoretical framework by means of a metaphor and illustrations. Accordingly, the practical framework guides the users through the underlying theories, culminating in the users needing to understand three concepts associated with:

1) Survival & Growth: The elements that affect strategic fit and hence survival and growth.
2) Strategy Formation: The important interplay between the formal and emergent strategy formation processes, the different strategy perspectives and the necessity for strategy as practice to be an institutional competency.
3) Strategy Formulation: The stages, phases and underlying considerations that have to be taken into account to formulate successful strategies and obtain VC funding.

6.4.4.1 Survival and Growth

As is the case with the theoretical framework, the practical framework initiates by presenting a wholistic view, as to the elements that affect SME survival and growth, before focusing on the factors that affect strategic fit and successful strategy formation and ultimately strategy formulation.

Illustrated in Figure 56 is the SME survival and growth sub-framework as presented in Section 6.3.2.1, with the introduction of the metaphor in relation to the respective theoretical sub-framework illustrated in Figure 57. The framework is presented pursuant to the users being informed of the underlying theories, which contribute to its construction.

At this level of detail, the users has to understand the following:

- The firm consists of a set of resources, with knowledge regarding how to obtain and effectively combine internal resources being central to SME survival and success.
- The level of match (strategic fit) between the firm's internal (resources & knowledge) and external context (opportunity & threats) is the ultimate determinant of firm success.
- Strategic fit is a function of the correct knowledge related to the market, management and operational domains associated with the firm and the opportunity set.
- Ultimately, strategic fit depends upon the firm correctly identifying knowledge and resource shortcomings and, through strategic entrepreneurial actions, overcoming obstacles to success.

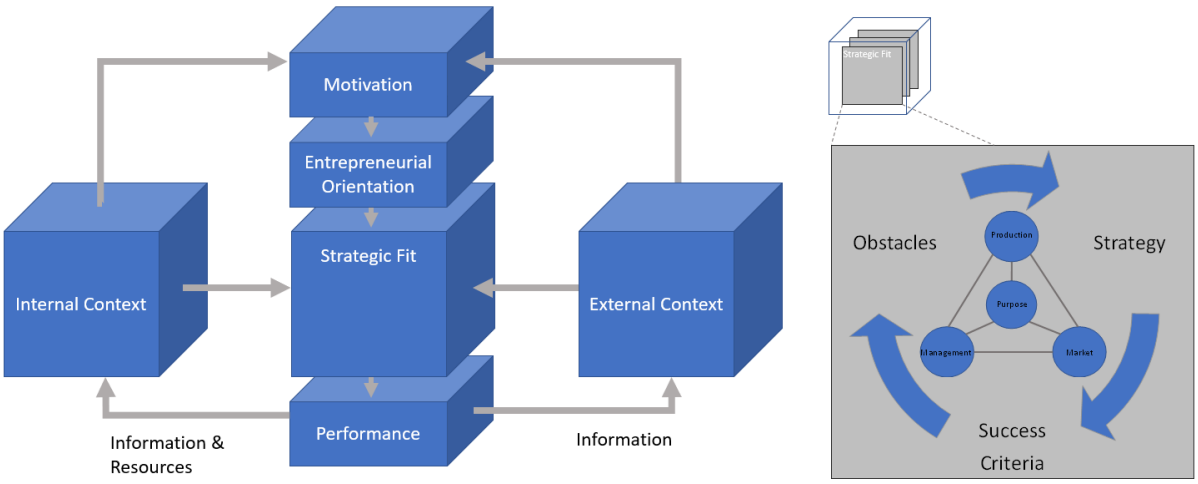


Figure 56 – SME Survival & Growth Theoretical Framework

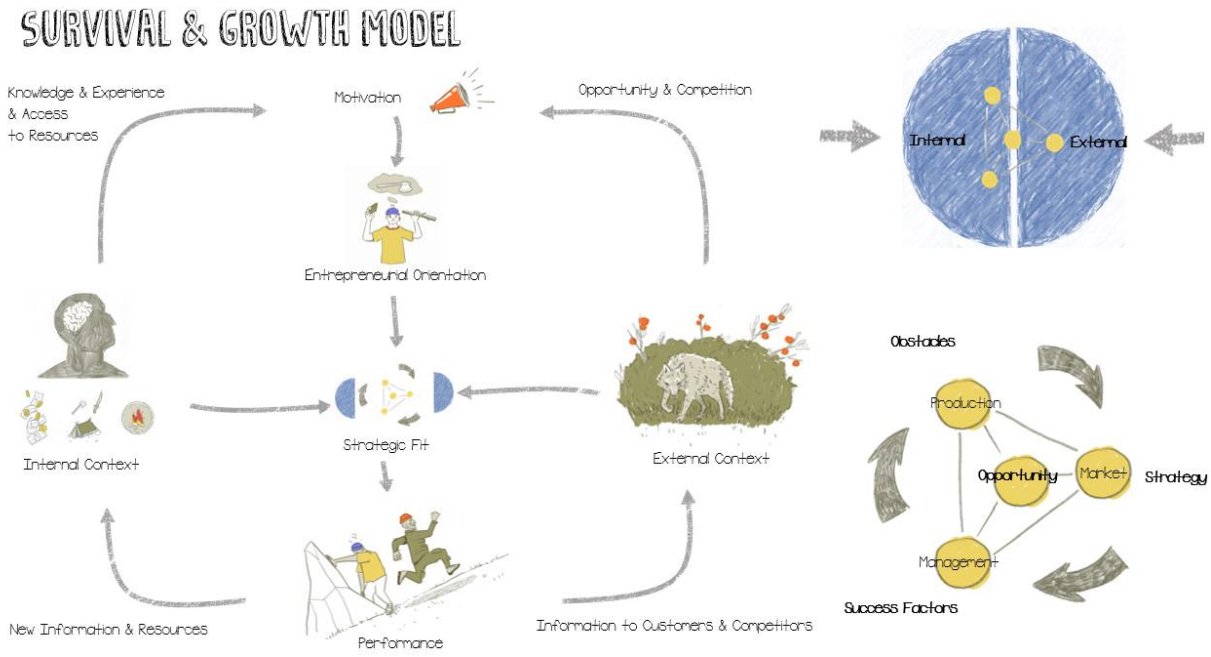


Figure 57 - SME Survival & Growth Practical Framework

6.4.4.2 Strategy Formation

Having established a framework of understanding that the ultimate determinant of success is strategic fit, the framework goes on to present the various strategy perspectives and the concept of a business model(Appendix B-3), before arguing that strategic fit is a function of strategy as practice being a core competency.

Before the relevant practical sub-framework is presented to the users, the relevant underlying theories are depicted and illustrated, accompanied by appropriate explanations by the facilitator; this would allow the users to understand:

- That strategic choice is prevalent at certain decision points, and that successful strategies are the result of correctly identifying and subsequently obtaining success factors, whilst nullifying sources of failure.
- Successful strategies are formulated by considering the four strategy dimensions.
- A successful strategy process is the function of both deliberate planning and emergent learning from the day-to-day activities.
- Successful strategies are the result of making the competition irrelevant, developing and exploiting internal capabilities and having an in-depth knowledge of your customers.

Illustrated in Figure 59 is a comparison of the practical framework, using the metaphor and illustrations, against the theoretical framework developed in Section 6.3.2.2.1 in Figure 58.

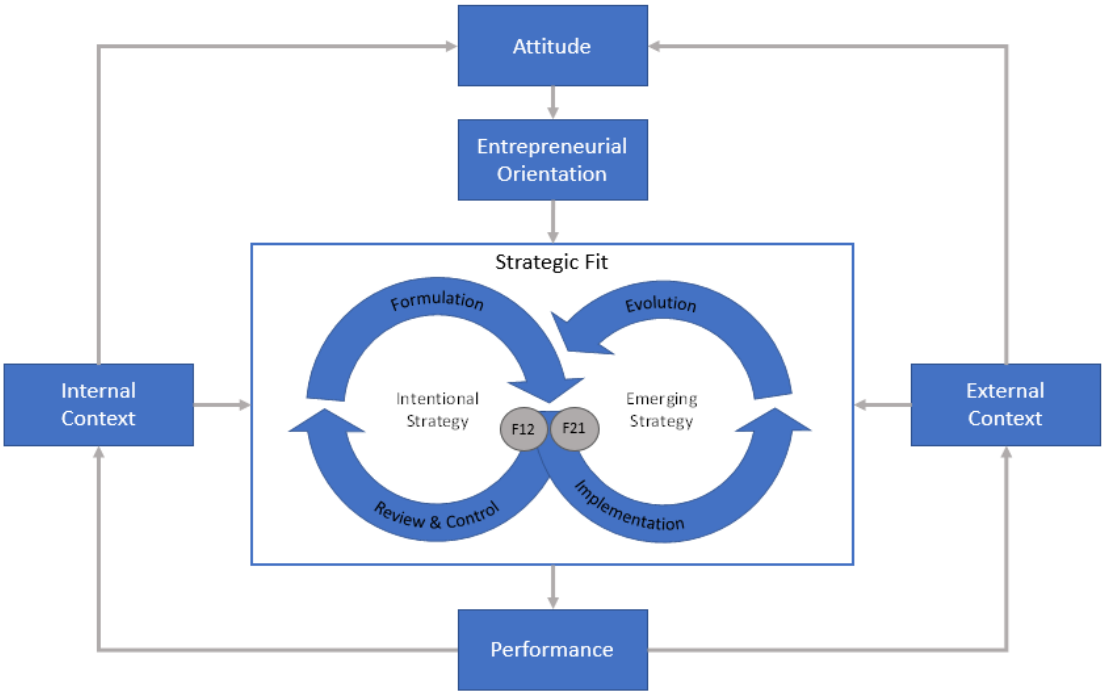


Figure 58 - Theoretical Strategy Formation Sub-Framework

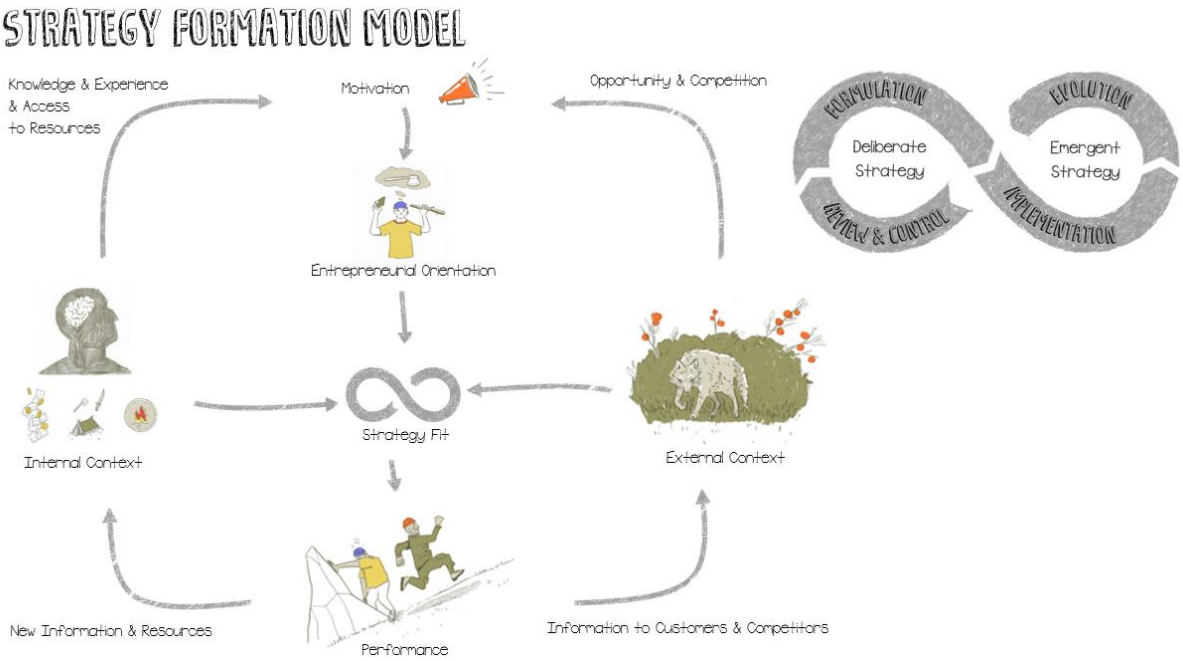


Figure 59 – Practical Strategy Formation Sub-Framework

6.4.4.3 Strategy Formulation

The final phase in developing an understanding regarding the final strategy formulation framework is to present the argument that successful strategies are formulated from understanding the five question words and achieving the associated sub-function objectives.

Additionally, the users are presented with the VC decision criteria and the synonymous concept of venture capitalists favouring characteristics negatively correlated to risk, i.e., knowledge, experience and access to the necessary success factors.

Within each of the stages, the various phases are explored, with the users being informed of the specific objective of each stage and asked the relevant questions that need to be considered, and with the facilitator being able to draw connections to the previous sub-frameworks.

Accordingly, the users need to understand that successful strategies are born from understanding the elements within the phases, as they support the ability to answer the five stage questions:

- Why are we doing this?
- Who will we target?
- How will we execute?
- When will we know?
- What will we do?

Illustrated in Figure 60 and Figure 61 are the respective theoretical and practical frameworks associated with strategy formulation and ultimately the theoretical and practical Cognitio frameworks as the combination of the respective sub-frameworks in Figure 62 and Figure 63.

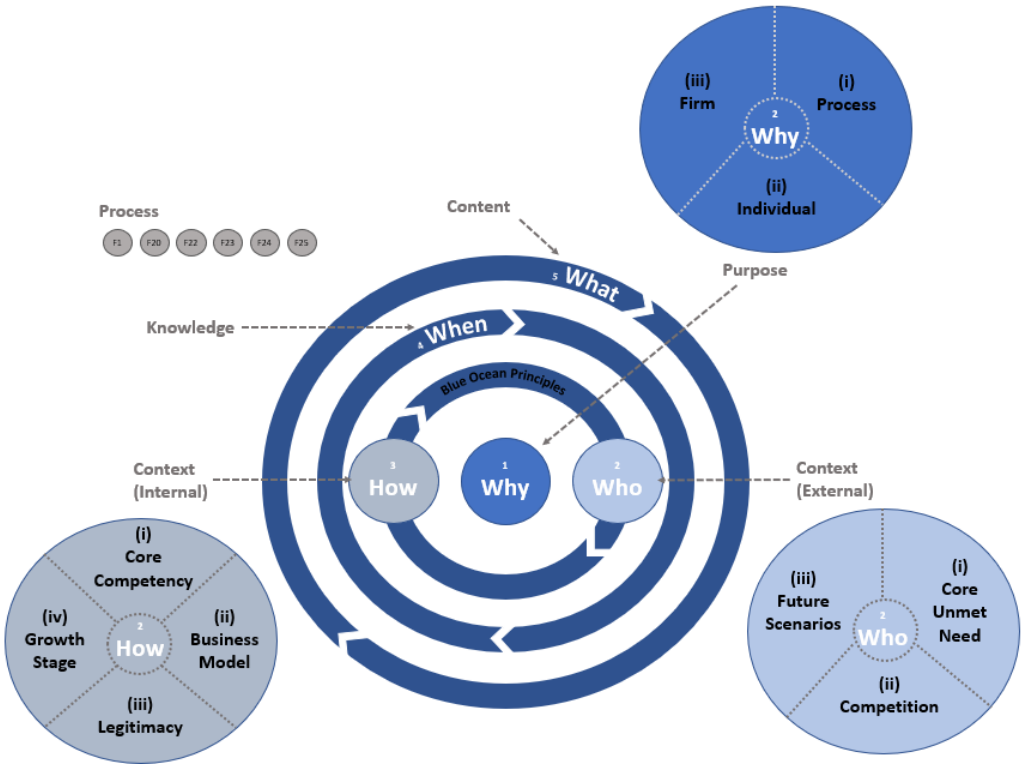


Figure 60 - Theoretical Cognition Framework

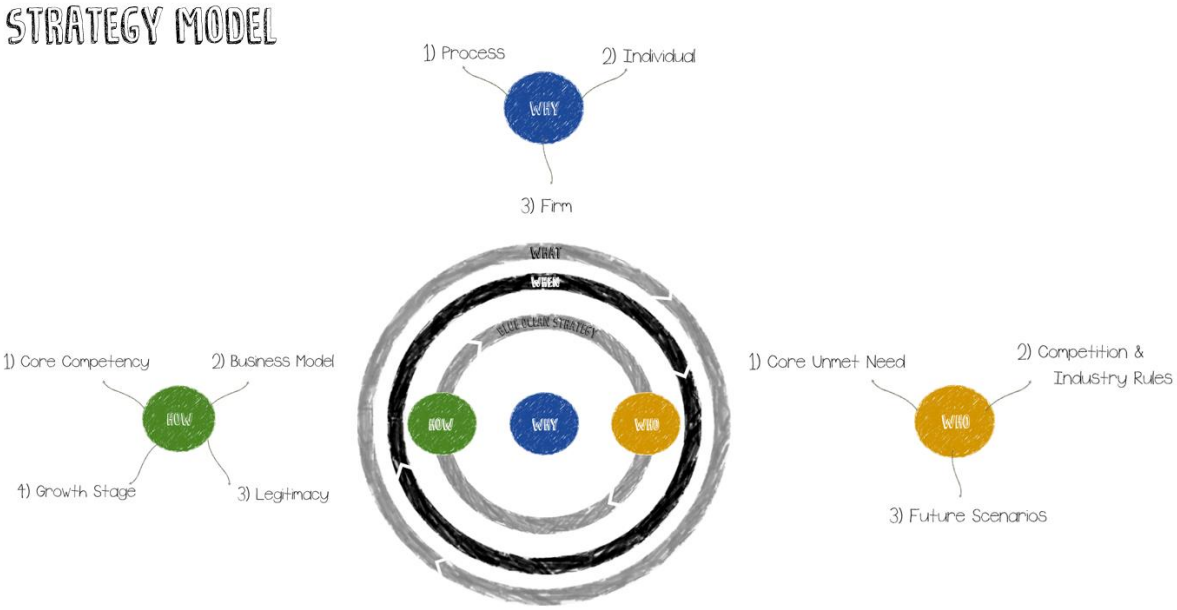


Figure 61 - Practical Cognitio Framework

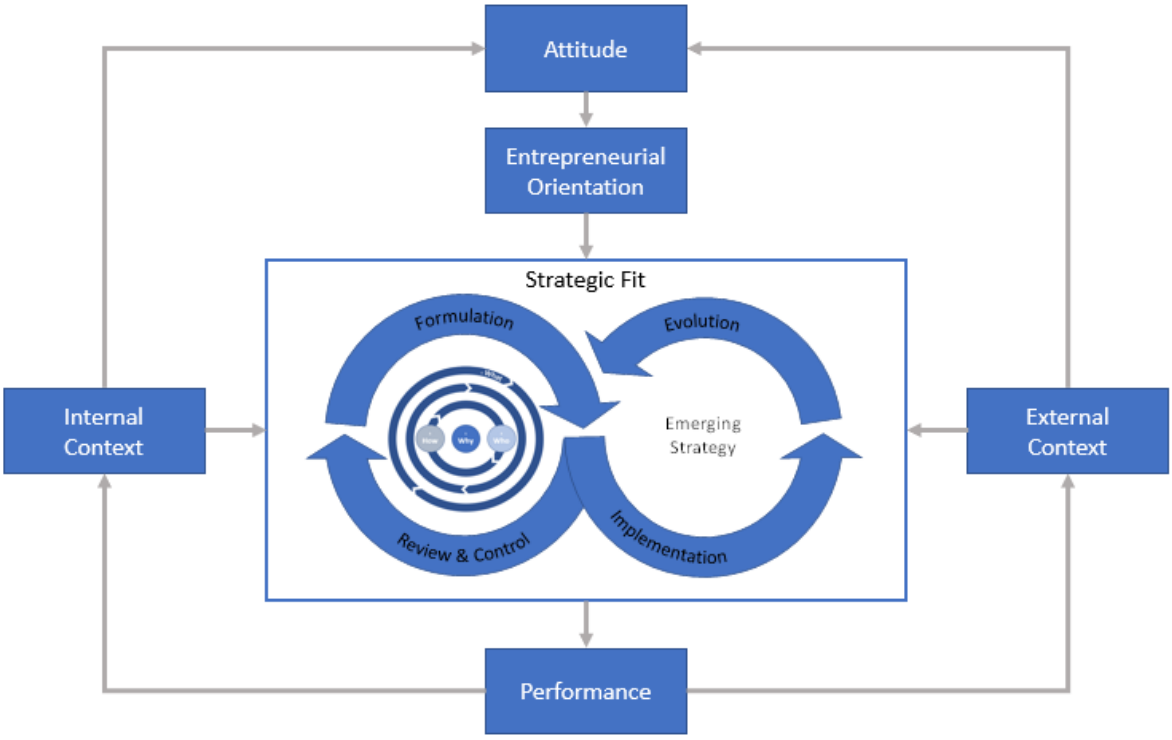


Figure 62 - Theoretical Cognitio Framework

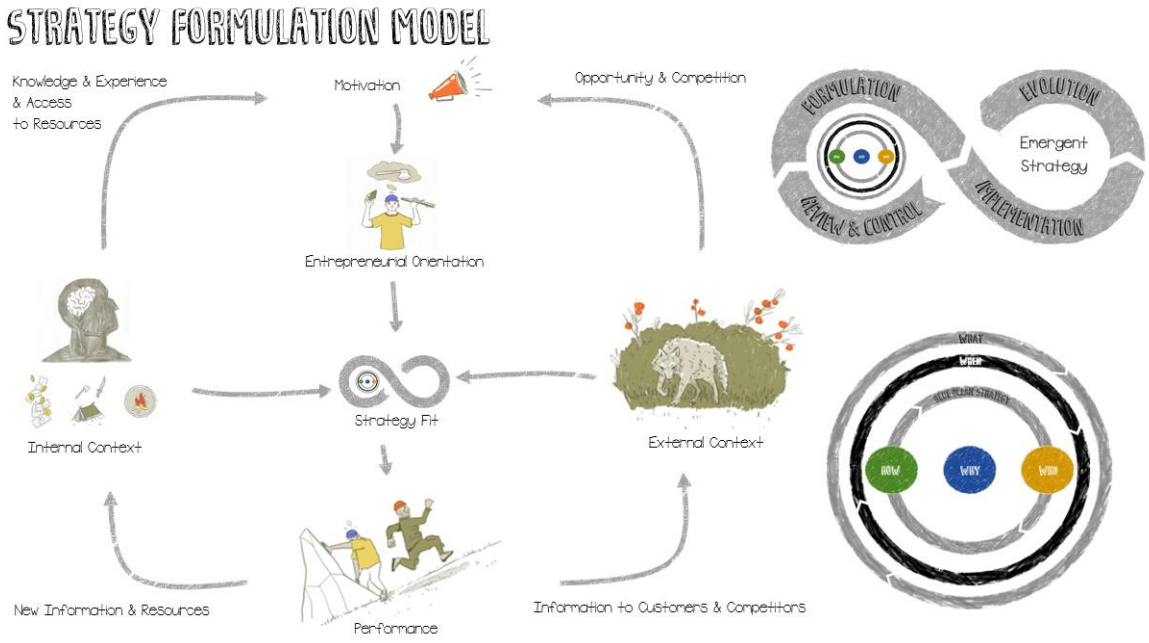


Figure 63 - Practical Cognitio Framework

6.5 Chapter Conclusion

In accordance with the systems engineering approach and the systems engineering method, this chapter has brought about understanding by building up a picture of the phenomenon of successful strategy formulation in SMEs and understanding the various interactions (Ison, 2008) with the domains of SME survival and growth and VC.

In accordance with the framework development process proposed by Jabareen (2009), the study utilised concept mapping as the framework development process. The process entailed (1) identifying additional requirements and design considerations to those consolidated in Chapters 3, 4 and 5, (2) categorising these elements in (1) to understand their implications and restrictions, and (3) developing frameworks as solution conceptualisations at increasing levels of detail to understand what is going on and why.

The resulting Cognitio framework seeks to explain the factors and their mode of impact on SME survival and success, as well as the required process of strategy formation and to bring about knowledge and ultimately an improved degree of strategic fit. The process of strategy formation is continuous, as SMEs periodically engage in activities and seek to answer the questions captured within the phases and stages of the strategy formulation sub-framework, reviewing the strategy's evolution as it is modified during daily operations.

In accordance with the research design (Section 1.6) the chapter determined that the VC decision criteria and the factors that affect SME survival and growth as well as successful strategies are largely aligned. Allowing the study to answer the final sub-research question and achieved the associated sub-objective.

Table 52 - Sub-Research Question and Sub-Objective Completion

CODE	Research Question	CODE	Objective/Solution	Section(s) Answered /Achieved
SRQ12	How are VC decision criteria aligned with the factors that influence SME survival and growth as well as successful strategies?	SRO12	Understand the alignment of VC decision criteria to the factors that influence SME survival and growth as well as successful strategies?	6.3.3.4

Chapter 7 – Verification & Validation

The purpose of this chapter is to verify that the framework ascribes to the requirements and objectives derived from theory, and to validate that the framework, as the ultimate solution, achieves the research objective.

7.1 Introduction

According to Boehm (Boehm, 1984), the process of verification entails determining whether the system was built right, whereas validation requires assessing whether the right system was built.

Accordingly, this chapter will determine whether the framework satisfies the requirements, restrictions and guidelines developed from theory and informed by the solution space, and ultimately whether the framework will deliver upon its intended objective.

7.2 Verification

The purpose of this section is to verify that the framework fulfils the requirements, design considerations and objectives derived in Chapter 6.

Chapter 7 revealed that 25 functional requirements were developed from theory and 19 conceptual requirements were informed by the solution space. The requirements were subsequently categorised according to the categories proposed by Van Aken, et al., (Van Aken, et al., 2006).

Verification requires evaluating (i) whether the framework addresses the conceptual requirements developed in Chapter 7, and (ii) confirming that the functional requirements, which informed the development of the frameworks, are satisfied by the specific phases and stages of the framework.

Table 53 through Table 57 illustrate that verification was done by determining whether the requirements within each of the categories as proposed by Van Aken, et al., (2006) (see the rows in Table 53 through Table 57) were addressed by specific phases or stages (see the columns in Table 53 through Table 57) of the framework or were satisfied conceptually by the entire framework.

7.2.1 User Requirements

With the user requirements derived in Chapter 6 being conceptual they are applicable to the framework as a whole. Accordingly, Table 53 illustrates how the framework as a whole addressed the various requirements, and that the requirements were not satisfied by a specific phase or stage.

Table 53 - User Requirements Verification

	High Level Phase	Why			Who			How				When	What
	Stage	Process	Individual	Firm	Core Need	Competition	Future	Core Competency	Business Model	Legitimacy	Growth Stage		
Design Consideration ID	Design Consideration	Satisfying Component											
U1	The framework has to be applicable across a number of industries and cater for differing sizes of SMEs.	The framework allows participants to review their own context applicable to their industry and level of development and allows the users to design their own strategy taking this into account											
U2	The framework needs to take into account the context of the South African SME in particular with regard to resource constraints.	The framework not only simplifies the strategy process to take into account the level of education and limited time available to the process but also engraines the neded to overcome resource shortages within the process itself											
U3	The framework as decision aid needs to be communicable and therefore simple and easy to understand.	Through the use of the metaphor and graphics the framework explians the various elements which impact on SME survival and growth as well as succesful strategy formulation.											
U4	The framework should be flexible in allowing the facilitator/consultant to utilise their own selection of tools and processes to answer the framework questions and achieve the objectives within each step.	The framework allows for the substitution of tools as long as the tools achieve the requirement and objectives within each stage and elicit answers to the framework questions.											
U5	The framework should enable and support individual and group participation and allow the user(s) to take ownership of the ultimate design of the strategy.	The tools encourage group participation, and the framework allows the users and or facilitator to concentrate more on certain areas, if they feel it is necessary, by asking the users to reflect on the process.											

7.2.2 Design Restrictions

The design restrictions as derived in Chapter 6 were conceptual in nature and therefore applicable to the framework as a whole, and accordingly the restrictions were not satisfied by a specific phase or stage, but were conceptually addressed by the framework in its entirety.

Table 54 - Design Restrictions

	High Level Phase	Why			Who			How				When	What
	Stage	Process	Individual	Firm	Core Need	Competition	Future	Core Competency	Business Model	Legitimacy	Growth Stage		
Design Consideration ID	Design Consideration	Satisfying Component											
R1	The framework is not intended to provide in-depth knowledge of each element that affects successful strategy formulation in a single sitting, although its intensive use over a number of days may achieve this. Rather it is intended to be used iteratively, with learning occurring incrementally.	The facilitator has the ability to choose different tools, which delve into each topic to various degrees of detail. The framework promotes continual use by asking the users to reflect on the knowledge created, and to bring about action that creates new knowledge for future review.											
R2	The framework is not meant to provide prescriptive tools that may not be substituted. Rather the suggested tools are well known in academia and industry and are known to be effective in achieving the objectives of the framework.	The framework allows for the substitution of tools, as long as the tools achieve the requirements and objectives within each stage and elicit answers to the framework questions.											
R3	Although the framework may be applicable to larger corporates, its intended use is within SMEs. Although SMEs may be affected by nuanced factors, the framework is intended for the representation of SMEs as developed from theory, which is believed to be a reflection of SMEs in practice.	The requirements were derived from theory related to SMEs and accordingly the solutions informed by theory are applicable to SMEs. The facilitator would need to consider whether the defining elements of SMEs, i.e., an abundance of obstacles and a shortage of resources, are prevalent, and whether tools and frameworks designed for larger corporates are more appropriate.											

	High Level Phase	Why			Who			How				When	What
	Stage	Process	Individual	Firm	Core Need	Competition	Future	Core Competency	Business Model	Legitimacy	Growth Stage		
Design Consideration ID	Design Consideration	Satisfying Component											
R4	The framework is intended to support strategy formulation and, although implementation is considered, the framework does not have to address the implementation processes of resource allocation, project selection, budgets etc.	Strategy implementation requires different considerations than those applicable to the study and therefore the framework does not guide srategy implementation considerations.											
R5	Use of the framework does not guarantee SME survival and growth, rather it synthesises the current view of best practices and theory, which support successful strategy formulation in SMEs.	The implied solutions were informed by modern theory and best practices; however, success is a function of implementation and a number of issues, which need to be considered by future studies to ensure success.											
R6	The framework's objective is to provide a mental model for decision making; and it is not intended to provide guidance regarding technical regulatory and tax issues.	It is assumed that either the users will know that certain regulatory or tax issues have a bearing on the company and/or their uncertainty will prompt them to seek advice from an appropriate expert.											
R7	The framework is intended to formulate strategies in alignment with venture capital decision criteria; however, strict adherence is not required, as SMEs may have other growth motivations and/or sources of financing.	The thoery and best practice captured within the framework is aligned with the venture cpaital decision criteria i.e. a negative correlation to risk and an improved probability of success however the users may decide not to pursue Venture Capital pursuant to the use of the framework.											
R8	The framework is intended to facilitate SME strategy formulation in alignment with venture capital decision criteria and is not intended to facilitate the venture capital process from an SME or venture capital perspective.	Venture capitalists review a number of issues over a period and although the framework is aligned with their decision criteria the success of the process itself falls outside the scope of the dissertation and will require further review by future studies.											

	High Level Phase	Why			Who			How				When	What
	Stage	Process	Individual	Firm	Core Need	Competition	Future	Core Competency	Business Model	Legitimacy	Growth Stage		
Design Consideration ID	Design Consideration	Satisfying Component											
R9	With the framework not intended to facilitate the venture capital process, the venture capital firm specific factors or financial considerations do not have to be considered.	Different venture capital firms have different investment preferences regarding return, industry sector etc. Given that the framework is aimed at the SME population in general, these specific considerations need not be considered. Venture capital firms are concerned with the ultimate strategy and, although they should consider the strategy formation process for future success, the process itself is not part of their initial decision criteria.											

7.2.3 Functional Requirements

Table 55 below illustrates that a number of the functional requirements were applicable to the framework as a whole, whereas other requirements were satisfied by specific phases and stages within the framework. Where a 'tick' mark is provided, it denotes which specific stage or phase satisfies the corresponding functional requirement. The justification of the relevant requirement is contained within Chapter 6 with the various frameworks depictions referencing the respective requirements.

Table 55 - Functional Requirements

	High Level Phase	Why			Who			How				When	What
	Stage	Process	Individual	Firm	Core Need	Competition	Future	Core Competency	Business Model	Legitimacy	Growth Stage		
Design Consideration ID	Design Consideration	Satisfying Component											
F1	The use of the framework should lead to an improved understanding of the factors that affect SME survival and growth and the development of strategy in support of increasing the firm's chances of success.	Through the use of the metaphor and graphics the framework educates the users regarding the elements that affect SME survival and growth as well as the strategy perspectives, which improve an SMEs chances of success.											

	High Level Phase	Why			Who			How				When	What
	Stage	Process	Individual	Firm	Core Need	Competition	Future	Core Competency	Business Model	Legitimacy	Growth Stage		
Design Consideration ID	Design Consideration	Satisfying Component											
F2	The framework will require the user(s) to state their motivation for growth and willingness to engage in entrepreneurial actions.		✓										
F3	The framework will require the user(s) to identify and justify the information asymmetry about the market opportunity from a demand and supply (transaction cost) perspective.				✓	✓	✓						
F4	The framework will require the user(s) to identify the means to transfer knowledge to the right customers as to the benefits and legitimacy of the offering.									✓			
F5	The framework will require the user(s) to identify the information asymmetry and required success criteria relating to execution of the opportunity.								✓				
F6	The framework will require the user(s) to identify risk reduction strategies to overcome risks and resource shortcomings and evaluate under which circumstances these strategies will fail.								✓				
F7	The framework will require the user(s) to identify the means of demonstrating the legitimacy of the opportunity and the firm to internal and external stakeholders.									✓			
F8	The framework will require the user(s) to identify how they can justify their knowledge or beliefs related to an existing opportunity, and how they will be able to identify new information related to their knowledge set and modify it accordingly.											✓	

	High Level Phase	Why			Who			How				When	What
	Stage	Process	Individual	Firm	Core Need	Competition	Future	Core Competency	Business Model	Legitimacy	Growth Stage		
Design Consideration ID	Design Consideration	Satisfying Component											
F9	The framework will require the user(s) to identify future obstacles as the business grows, and to understand as well as decide how and when they will address them.										✓		
F10	The framework will require the user(s) to identify how they will identify new knowledge related to new opportunities.											✓	
F11	: The framework will require the user(s) to identify how they will exploit their resource base to pursue new opportunities.							✓					
F12	The framework will need to illustrate the elements of successful strategy formulation and allow the user(s) to understand the interplay between formal strategy formulation and emergent strategy realisation against the backdrop of the factors that affect SME survival and growth.	✓											
F13	The framework will require the user(s) to explore and define their understanding of the customer context and identify the customers' current and future and what may be unknown core needs.				✓	✓	✓						
F14	The framework will require the user(s) to explore and define their understanding of the firm's external context and identify alternate existing and future success potentials with favourable strategic characteristics now or pursuant to the implementation of isolating mechanisms.					✓							

	High Level Phase	Why			Who			How				When	What
	Stage	Process	Individual	Firm	Core Need	Competition	Future	Core Competency	Business Model	Legitimacy	Growth Stage		
Design Consideration ID	Design Consideration	Satisfying Component											
F15	The framework will require the user(s) to explore and define their understanding of the firm's internal context and assess the alternate means to reduce, negate or recombine the partners, resources, capabilities and competencies as internal success criteria to effect current and future operational excellence in light of the success potentials.							✓					
F16	The framework will require the user(s) to map the micro elements of the business model and isolating mechanism(s) in light of the intended offering, strategy and competitors on a suitable, easily communicable canvas.								✓				
F17	The framework will require the user(s) to align the intended strategy with the paradigms of blue ocean strategy.				✓	✓		✓	✓				
F18	The framework will require the user(s) to develop a sense of purpose by developing a suitable mission and vision statement that may be reviewed throughout the process.			✓									
F19	The framework will require the user(s) charged with executing the strategy to develop short- and medium-term objectives for future review.												✓
F20	The framework will require the user(s) to develop a visual and effective means of communicating the strategy content in support of successful strategy implementation.	Visual communication is promoted through the use of the metaphor and graphics to explain the framework, with the choice of the invididual tools encouraging the use visual communication to achieve the desired objectives in each phase and stage.											

	High Level Phase	Why			Who			How				When	What
	Stage	Process	Individual	Firm	Core Need	Competition	Future	Core Competency	Business Model	Legitimacy	Growth Stage		
Design Consideration ID	Design Consideration	Satisfying Component											
F21	The framework as a continuous tool will require user(s) to assess and review the success of the strategy against the objectives and require them to answer whether they are not only 'doing things right', but are also 'doing the right things'.											✓	
F22	The resulting framework should ascribe to and support the success criteria as derived by Lofving et al. (2013).	The criteria proposed by Lofving are espoused to throughout the framework with the visual use of the metaphor and graphics to simplify and explain the concepts and promote learning, the clear steps and objectives associated with the strategy formulation process and the choice of tools encouraging communication as well as individual and group participation.											
F23	The framework should communicate the venture capital decision criteria favoured by investors and the concept that VCs prefer characteristics inversely associated with risk.	As reviewed in chapter 7 the functional requirements are aligned with the VC decision criteria, with the addition of the framework explicitly explaining the decision criteria to the users before the use of the framework and finally the relevant questions within the phases capturing the respective VC criteria.											
F24	The framework should support its continued use.	Through the explanation of the framework, its use and the development of knowledge through the 'When' phase users are encouraged to develop knowledge continually as they bring about action and review the results.											
F25	The framework should suggest tools, which assist the users in addressing the questions posed by the framework and achieving its objectives.	Various tools are proposed by the author; however, these are not meant to be prescriptive and may be substituted at the discretion of the facilitator.											

7.2.4 Attention Points

Attention points do not place specific restrictions on the framework; however, they were taken into account with regard to the design of the framework at a high level, and accordingly are conceptually satisfied by the framework as a whole. They are summarised in Table 56 below.

Table 56 - Attention Points

	High Level Phase	Why			Who			How				When	What
	Stage	Process	Individual	Firm	Core Need	Competition	Future	Core Competency	Business Model	Legitimacy	Growth Stage		
Design Consideration ID	Design Consideration	Satisfying Component											
A1	The facilitator/consultant has to have previous knowledge of group facilitation and strategy to guide the process.	Facilitators with previous knowledge would be better equipped to educate the users and provide suitable examples regarding the theory that underpin the framework to ultimately enable its effective use.											
A2	Certain tools and considerations used within the framework will be discretionary, a function of the background and experience of the facilitator, the entrepreneur and management team.	The tools to use are at the discretion of the facilitato,r as long as they answer the framework questions; and although the framework is aligned with obtaining succcess factors negatively correlated to failure, in alignment with venture capital decision criteria, SMEs do not have to pursue venture capital.											
A3	The level of detail to delve into each element is at the discretion of the facilitator and team, based on the objective of the strategy formulation exercise.	Where the entrepreneur and management team may have in-depth knowledge about certain elements, other elements may require significant exploration to develop new knowledge. The facilitator needs to assess the level of knowledge related to the element and whether the framework can proceed or whether further exploration is required.											

7.2.5 Boundary Conditions

The boundary conditions derived in Chapter 6 were unconditionally satisfied by the framework as a whole, as they are related to the framework in a conceptual manner. They are summarised in Table 57 below.

Table 57 - Boundary Conditions

	High Level Phase	Why			Who			How				When	What
	Stage	Process	Individual	Firm	Core Need	Competition	Future	Core Competency	Business Model	Legitimacy	Growth Stage		
Design Consideration ID	Design Consideration	Satisfying Component											
B1	The framework should be utilised to the benefit of all the users and it is not intended to exploit certain users or groups of users.	The tools suggested encourage participation by all the users, and the facilitator and management should ensure that no single person dominates the process and eploits it for their own gain.											
B2	The framework should be used in an ethical manner which, adheres to regulations and legislation	The facilitator and management need to ensure that the framework is not utilised unethically to effect actions in contravention of regulations and legislation.											

7.2.6 Verification Conclusion

The section above demonstrates that the framework adheres to and addresses the requirements derived from the literature and informed by the intended solution space. Accordingly, the section above verifies that the framework was 'built right' as proposed by Boehm (Boehm, 1984).

7.3 Validation

The purpose of this section is to validate whether the framework achieves its intended objective as a practical tool to support strategy formulation for SMEs.

In accordance with Boehm (Boehm, 1984), validation requires assessing whether the framework is fit for its purpose and achieves its intended objective. In accordance with the concept-map development process and the methodology derived in Chapter 2, validation was done via one-on-one semi-structured interviews with domain experts and an illustrative case study.

Due to the lack of a combined research field that takes into account SME survival and growth, strategy and VC decision making, domain experts were identified by considering the criteria associate with suitable informants (Section 2.7.2.1) and seeking individuals with significant experience in at least one of the research fields. As a consequence, the framework was validated in parts.

As is illustrated in Figure 64, the validation process entailed semi-structured interviews to verify the respective building block sub-frameworks, which formed the foundation of the ultimate theoretical framework. Incorporating the expert opinions regarding the technical difficulties associated with the framework, the theoretical framework was translated into a practical framework with the use of a metaphor and graphical illustrations, before its ultimate validation and a final review of the practical application of the framework via a case study.

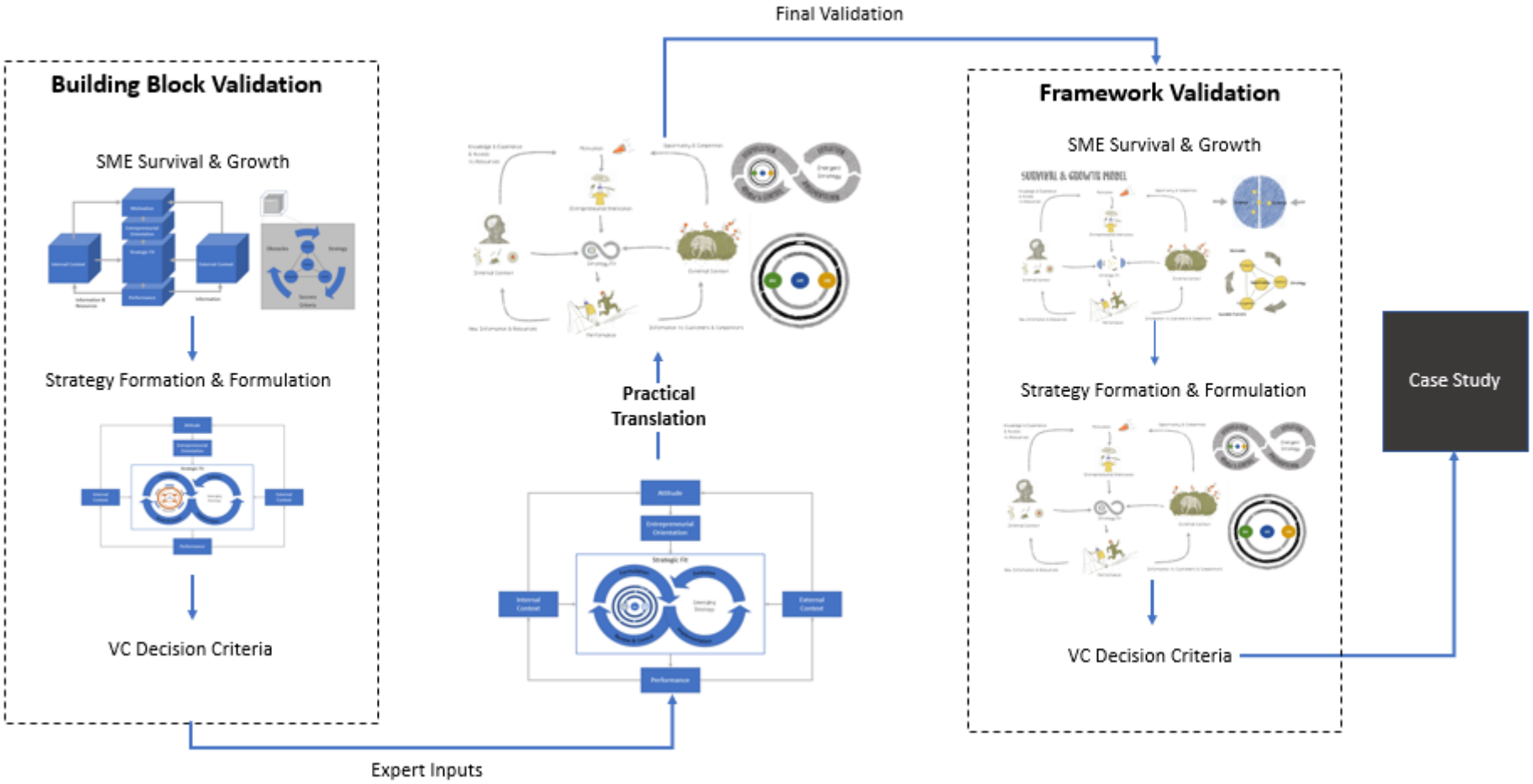


Figure 64 - Validation by Parts Process

7.3.1 Semi Structured Interviews

The domain experts listed below were identified by considering the criteria in Section 2.7.2.1., i.e., whether the informants were knowledgeable about the topic and able to provide detailed experiential information about the domain.

In accordance with Rose's (1994) checklist in in Section 2.7.2.1, the experts were presented with the choice of confidentiality and whether they wanted to remain anonymous. Some of the experts elected to do so and thus it was subsequently decided to grant all the interviewees anonymity.

The domain experts were chosen due to their practical and/or theoretical knowledge related to each domain, as is evidenced by their experience and background presented in Table 58.

Table 58 -Background and Experience of Experts

Interviewee	Position and background summary
Dr DK	Dr DK served as a lecturer with a prominent South African university, has a PhD related to SME development with more than 10 years' experience in the private equity industry, with specialist skills in enterprise engineering, business consulting, SME development and strategy.
Mrs AN	AN has more than 20 years' experience in innovation commercialisation and venture capital, and heads up the technology transfer office of one of South Africa's eminent universities charged with developing university innovations into fully fledged businesses. AN has specialist skills in SME development, strategy and venture capital.
VB	VB has experience in international mining business development, and has been involved in facilitation and strategy development for more than 20 years. VB lectures strategy at a number of tertiary MBA institutions and is viewed as an expert in SME development, strategy and facilitation.
Prof SB	Prof SB is the acting head of the Department of Industrial Engineering at a South African university and developed his experience through management consulting specialising in strategy and technology investments. Prof SB is seen as an expert in business development, strategy and technology investing.
BS	BS has more than 30 years' experience in investing and business development as a founder of one of South Africa's most successful Johannesburg Stock

Interviewee	Position and background summary
	Exchange listed investment holding companies. BS has specialist skills in venture capital, business development and strategy.
RD	RD has more than 10 years' investment experience as part of the emerging market mergers and acquisition teams of one of South Africa's largest insurance companies. RD currently manages a venture capital fund in South Africa supported by a large institutional bank as anchor investor.

Dr DK and AN were chosen as the domain experts related to SME survival and growth, VB and Prof SB reviewed strategy formation, and BS and RD validated the venture capital decision criteria. The final framework, which incorporated the experts' recommendations related to the respective sub-frameworks and suppositions, was validated during follow-up interview sessions.

The interview process consisted of the interviewees attending a presentation, which outlined the domains reviewed, the underlying theories considered, the study's suppositions and the synthesis of the respective sub-framework, and culminated in a question and answer session (see Appendix B). The experts were allowed to ask questions throughout the presentation in order to extract the maximum value from the interaction.

The interviewee questions were designed by taking into account the considerations detailed in Section 2.7.2.1, namely segmentation and question construction:

- **Segmentation:** The questions were divided into the three segments, as suggested by (Galletta, 2013). Accordingly, the opening segment was designed to learn about the interviewees and their experience, the middle segment utilised open-ended questions to draw greater detail about the topic from the interviewees, and finally the concluding segment was designed to reflect on the framework and allow for unplanned follow-up questions.
- **Construction:** All of the questions were constructed as open-ended questions to extract opinions, apprehensions and recommendations from the various domain experts and yet achieve a specific objective related to the study.

7.3.2 Building Block Validation

In accordance with the methodology, the various building block sub-frameworks that inform the ultimate framework were validated by interviews with the appropriate domain experts.

7.3.2.1 Sub-Framework: SME Survival and Growth

The following rationale outlined in below

Table 59, informed the questions to validate certain aspects of the sub-framework.

Table 59 - Sub-Framework Validation Components

Number	Open Ended Question	Objective	Validation Aspect	Additional Topics Discussed
1	Do you have previous experience with SME survival and growth models/frameworks?	Learn about the interviewee's experience and establish whether the domain expert has the necessary background to act as validation adjudicator.	Credibility of expert inputs.	- Where were you introduced to models/frameworks? - How often do you use models/frameworks?
2	Does this framework bring about an improved understanding of the factors that influence SME survival and growth, and the interactions of these factors?	Establish whether the framework brings about improved understanding regarding the elements which impact upon the phenomenon.	Synthesis of the theoretical elements and achievement of the requirement objectives.	- Which components brings about understanding? - Is there anything in particular that strikes you?
3	Is there any other framework that you know of that better explains SME survival and growth?	Determine whether the study omitted any research domain pertinent to the phenomenon.	Completeness of the framework's theoretical elements and the suppositions drawn by the study.	- Does the framework omit/neglect any important aspect? - Do you agree with the synthesis of the framework's various components and the suppositions drawn?
4	Where do you believe the framework falls short of its objective?	Bring about reflexion as to possible shortcomings of the sub-framework.	Effectiveness of the framework.	- If the framework will fail in its intended objective, why do you believe this will be the case?
5	Do you believe the framework will support strategy formulation efforts and subsequent survival and growth?	Establish whether the sub-framework supports the study's objective.	Achievement of the study's objective.	- How do you believe does the framework accomplish its intended objective?

Below are the key takeaways from the experts related to each open ended question and related topics discussed:

- **Question 1:** Do you have previous experience with SME survival and growth models/frameworks?

AN indicated that, as head of the commercialisation efforts of the university, which includes a start-up incubator, she did indeed have experience in this field.

> *"Nearly all of our technologies or developments become housed in a small business, which typically utilises some form of a framework, such as a business model canvass to guide the development of their business model. This model naturally assumes some world view associated with the factors that determine survival and are best suited for growth".*

Dr DK indicated that he too had previous knowledge and experience in the field:

> *"I have co-authored a paper that takes into account previous models associated with the domain, and my own PhD was informed by theoretical survival and growth models."*

- **Question 2:** Does this framework bring about an improved understanding of the factors that influence SME survival and growth, and the interactions of these factors?

AN indicated that she did believe that the model accomplished this objective:

> *"I would actually like to use the model to reflect on one of our businesses, which is currently failing to achieve strategic fit."*

Dr DK replied:

> *"Yes, I do believe it brings about improved understanding, especially from a theoretical perspective and how the theories fit together."*

However, both experts proposed that the average entrepreneur and SMEs management might not have the necessary background and experience to understand the underlying theory and concepts, which is also why their firms are unable to survive and grow. Accordingly, both experts advised that a way be found to explain the elements and their interactions to non-domain experts.

- **Question 3:** Is there any other framework that you know of that better explains SME survival and growth?

Both experts confirmed that they did not know of any framework in theory or practice, which better explained the elements that influence SME survival and growth, and the interactions of these factors.

AN mentioned:

> *"I like the way in which the model is not linear, in comparison to other models, which simply state 'do this' or 'that' and you will come out on top. Where your model captures more the complexity of trying to find out what works and finding that match between the business and the market."*

Dr DK stated that he believed the addition of liability of newness and the flow of knowledge was a valuable contribution to previous models of growth, as these elements added further understanding and clarity to the interacting elements and the process of obtaining strategic fit.

- **Question 4:** Where do you believe the framework falls short of its objective?

Both experts believed that a shortcoming of the framework was in the complexity associated with the underlying theory and concepts, and the fact that the average entrepreneur or SME management would not be able to understand these concepts and derive the necessary explanatory power, without assistance from an appropriate facilitator or examples.

AN responded:

> *"The framework's strength is also its weakness, namely its lack of linearity. So, in weighing up which framework to use, entrepreneurs or management may opt to choose, incorrectly so, the simpler linear model, which promises 'success' rather than seeking truth."*

- **Question 5:** Do you believe the framework will support strategy formulation efforts and subsequent survival and growth?

Both experts believed that the framework of SME survival and growth presented in the presentation had explanatory power and that it would bring about an improved understanding regarding the elements affecting the survival and growth of new ventures and SMEs, and the interactions of these elements; by means of this knowledge, entrepreneurs and SME management would better understand and be able address their shortcomings to improve their firms' chances of survival. However, both experts re-iterated their viewpoint under Question 4.

Dr DK said:

> *"Once understood, the framework would bring about great power and understanding on the part of the entrepreneur and management in guiding their decision making to overcome their weaknesses."*

- **Follow-Up Question:**

In light of their feedback, the following question was posed to the domain experts:

> **How would you suggest I address the complexity of the underlying theories and framework?**

AN believes that the complexity could be addressed by means of an interactive course, visualisations or an illustrated book with examples and case studies. Dr DK believes that the complexity could be addressed with the assistance of a facilitator or consultant who has knowledge about the sector and can provide tangible examples "closer to home".

7.3.2.2 Sub-Framework: Strategy Formation in SMEs

As was the case with validating the sub-framework regarding the elements and interactions that underpin SME survival and growth, semi-structured interviews were held with domain experts with significant experience in strategy associated with SMEs. The framework questions had the same rationale as those listed in

Table 59 to validate the sub-framework related to SME survival and growth. Below are the key takeaways from the experts related to each open-ended question and related topics discussed

- **Question 1:** Do you have previous experience with SME strategy models/frameworks?

Both experts confirmed that they have considerable experience with various tools and frameworks intended to aid the development of strategies in SMEs.

VB replied:

> *"Yes, many dozens of them, taught by myself as an MBA lecturer and used in my own career in South Africa and abroad".*

Prof. SB explained:

> *"I have both a theoretical and practical background related to the topic; prior to focusing on academics full time, I was the chief strategic officer for a large listed company with the responsibility of pursuing new business opportunities by forming new affiliate SMEs."*

- **Question 2:** Does this sub-framework bring about improved understanding regarding the factors and their interactions that affect SME survival and growth, as well as the process of strategy formation and formulation?

Both experts indicated that they did believe that the framework successfully synthesised the elements, which influence successful strategy formation and subsequent survival and growth of SMEs.

Prof. SB elaborated:

> *"I like the way your framework brings together the top-down and bottom-up [approaches] and recognises the role of a business model and the micro-elements, which need to be considered".*

- **Question 3:** Is there any other framework that you know of that better explains the SME strategy interaction?

Neither of the experts knew of any other framework, which explained the interaction of the various elements better than the proposed framework did.

Prof. SB stated:

> *"I like the way your framework brings together the research based way of strategy formulation, sitting down and studying the problem, against the processual approach of trial and error and learning from the field."*

- **Question 4:** Where do you believe the sub-framework falls short of its objective?

Both experts were concerned with the ability of new ventures and SMEs to (1) understand the framework, given the complexity of the concepts and theory captured within it, and (2) execute the framework, given time constraints and the number of elements, which needed to be addressed.

VB declared:

> *"I believe it will be difficult to communicate your framework to the basic employee… the factory worker, the farmer".*

Prof SB said:

> *"If you can inculcate your framework's thought process in the employees of the firm, I can't see why it couldn't or wouldn't work."*

- **Question 5:** Do you believe the sub-framework will support strategy formulation efforts and subsequent survival and growth?

Both experts believed that, if the entrepreneur and management team were able to understand the elements captured within the framework, then this alone, without actual

formal formulation activities, would improve their understanding of their own business, the reasons for success and failure, their own shortcomings that needed to be overcome, as well as aiding in daily decision making.

VB stated:

> *"Your framework can be very powerful in guiding the strategy process, removing the ability of a single person steering the company in their own direction by having to justify their motivations to other users against the backdrop of the framework."*

Prof SB affirmed:

> *"An inculcation and understanding of the framework would be extremely valuable in improving daily decision making by identifying shortcomings and achieving strategic fit."*

- **Follow-Up Question:**

In light of their feedback, the following question was posed to the domain experts:

> **How would you suggest I address the complexity of the underlying theories and framework?**

VB recommended:

> *"You need to find a way that makes the theories and framework tangible to the audience, bringing it home to something they understand and work with every day."*

Prof SB suggested:

> *"I think new employees should undergo intensive induction before their time becomes precious within the company, which would allow employees in the field to work according to a singular way of thinking. The old strategic guard*

[theoretical modes] would look to the values of the firm to accomplish this, but I think your framework does this much better to bring about the same way of thinking."

7.3.2.3 Venture Capital Decision Criteria

In order to validate whether the use of a framework, which incorporates the high-level decision criteria as proposed by theory, would result in strategies aligned with venture capitalists' decision criteria and an improved probability of receiving VC funding, the following questions were posed to the two respective domain experts, BS and RD. The following questions were designed, taking into account the criteria discussed in Section 2.7.2.1, listed in Table 60 below.

Table 60 - VC Decision Criteria Validation Component

Number	Open Ended Question	Objective	Validation Aspect	Additional Topics Discussed
1	Do you have experience in the venture capital industry in the decision-making process?	Learn about the interviewee's experience and establish whether the domain expert has the necessary background to act as validation adjudicator.	Credibility of expert inputs.	- When did you enter the industry? - How often are you involved in the decision-making process?
2	Do you have tangible (documented) decision criteria that inform your investment decisions?	Determine whether venture capitalists have tangible decision criteria.	Whether venture capitalists primarily use intuitive decision processes.	- Do you review your investments against a list of decision criteria?
3	Do you believe the broad decision criteria as proposed by theory are largely complete regarding the considerations taken into account by venture capitalists?	Establish whether the venture capital experts agree with the broad decision criteria as proposed by theory.	Completeness of the decision criteria.	- Do you agree with the groupings as proclaimed in literature? - Does the theoretical list miss anything important?
4	Would you provide funding to a business that only adheres to some but not all of the decision criteria?	Assess whether the framework should consider all or only some of the decision criteria.	Relevance of all of the decision criteria.	- Do you favour any decision criteria over any other?
5	Do you agree with the concept that venture capitalists ascribe value to business characteristics (success	Verify whether venture capitalists ascribe value to business characteristics that are negatively correlated to risk of failure.	Funding bias toward favourable survival and growth characteristics.	- Are there any exceptions to the rule of risk and return?

	factors) that are negatively correlated to failure?			
6	Would you place a higher value on firms that are able to address their risks?	Confirm whether an assessment of lower risk was accompanied by a higher valuation	Confirm theoretical concept of risk and value.	- Is theory aligned to practice?

Below are the key takeaways from the experts related to each open-ended question and related topics discussed

- **Question 1:** Do you have experience in the venture capital industry in the decision-making process?

BS confirmed:

> *"Yes, I have sat on a number of investment committees of both listed and unlisted companies to evaluate a possible investment in high risk ventures. Even today, I along with a few friends have pooled our funds together to form a single family office private equity investment company with just under R500 million in investments to date."*

RD too affirmed:

> *"Yes, I was in charge of mergers and acquisitions in Africa for a large insurance company and today head up a 12J Venture Capital fund, which invests in early stage companies."*

- **Question 2:** Do you have tangible (documented) decision criteria that inform your investment decisions?

Both BS and RD replied that they did indeed have documented decision criteria, which their respective investment committees review before making a decision; however, their criteria are said to be captured within their fund mandate and are more wholistic and 'philosophical' in nature. In other words, the proposed investments must have the potential for significant returns above a hurdle rate determined by their firms, etc.

BS elaborated on this:

> *"The fund mandates certain minimum investment criteria, which capture the list you have; for example, our fund mandate says we must invest in companies where*

the management team has significant experience and a clear strategy. Therefore, this criterion ticks many of the boxes in your list."

- **Question 3:** Do you believe the broad decision criteria as proposed by theory are largely complete regarding the considerations taken into account by venture capitalists?

Both BS and RD believed the broad investment criteria presented in this dissertation did indeed capture the essence of what their investment committees intuitively reviewed when considering an investment. However, they also mentioned that, within the broad categories, there might be nuances, which are considered and discussed, but that these nuances are multiple, varied and informed by the proposed investment and the background of the committee members. BS proposed that these sub-considerations ultimately build up to answering or adhering to the broad criteria, i.e., of the management team having the necessary experience to guide the business to success.

RD explained:

"Other than the fund's minimum investment criteria, we rely on the experience of the investment committee to point out the positives and negatives of the investment from which we can estimate the risk associated with the venture."

BS stated:

"We will start with the broad fund mandate and work backwards to your granular elements. For example, we will start on the left of your table and look to experience, and work towards the right to the finer details."

- **Question 4:** Would you provide funding to a business that only adheres to some but not all of the decision criteria?

Both BS and RD believed that the entrepreneur and their team were perhaps the guiding criteria that would determine the success of a funding application, as there would never be

perfect knowledge related to each decision category; venture capitalists could take a measured leap of faith, as BS put it: "if you have to wait for it to make sense to everyone else, you have to wait in line with everyone else". However, both BS and RD were also adamant that, if the proposed investment did not satisfy all of the criteria in some form or another, it was highly unlikely that they would receive funding as the uncertainty would be too great.

RD clarified:

> *"If we see a risk, which the business has not addressed, and if we cannot address it as a fund with our own experience, funding or network, then we won't invest until the business can address it."*

- **Question 5:** Do you agree with the concept that venture capitalists ascribe value to business characteristics (success factors) that are negatively correlated to failure?

BS and RD believed that this concept fundamentally underpinned the venture capital decision process and that their job as funders was to correctly identify risks and assess whether the business or they as funders had the ability or the means to address these risks appropriately, in order to result in the success of the business.

- **Question 6:** Would you place a higher value on firms that are able to address their risks?

Both BS and RD replied that it stood to reason that reduced risk associated with a venture required a higher valuation; however, they proposed that the means and 'absoluteness' of the risk reduction strategy, referring to the concept of negative shocks to novelty, would influence their valuation considerations. For instance, validated and demonstrated risk reduction strategies would garner a higher valuation than theoretical ones.

7.3.3 Ultimate Framework and Metaphor Validation

In light of the need identified from the literature, which was verified by the experts, i.e., to communicate the theoretical findings and associated knowledge effectively to non-domain

experts, the author decided to translate the ultimate framework by means of a metaphor and illustrations.

Accordingly, the theoretical concepts within the framework, the phases and stages were captured in a short presentation with appropriate graphics, with follow-up interviews being conducted with the original domain experts. In addition to reviewing the translated sub-frameworks corresponding to the building block validated by each domain expert, the experts were asked to assess the framework in its entirety. The first 5 questions were posed to Dr DK, AN, VB, and Prof SB. In order to determine the alignment of the framework with VC decision criteria and its ability to inform the VC decision process, questions six and seven were posed to the VC experts, BS and RD. The rationale of the validation questions are set out in Table 60 below.

Table 61 - Framework Validation Component

Number	Open-Ended Question	Objective	Validation Aspect	Additional Topics Discussed
1	Do you believe the metaphor is suitably appropriate to bring about understanding regarding the framework?	Determine whether the metaphor would be suitably familiar among the intended audience.	Familiarity of metaphor.	- What do you like / dislike about the metaphor? - Do you know of a better metaphor?
2	Do you believe the metaphor brings about understanding with regard to the underlying theory?	Establish whether the metaphor was successful in facilitating understanding regarding the underlying theories.	Ability to communicate theoretical concepts.	- Do you identify with the metaphor? - Do you believe the metaphor is suitable for its intended audience?
3	Do you believe the inferred actions of the metaphor are aligned with the theoretical underpinnings of the framework?	Evaluate whether the actions inferred by the metaphor were aligned with the suitable actions proposed by theory.	Alignment of the metaphor with theory.	- Do you believe the inferred actions of the metaphor can be related to practice?
4	Do you believe the suggested phases, stages and tools are	Validate the breakdown of the theoretical concepts and the	Effectiveness of the framework and achievement of the requirement objectives.	- Do you agree with the requirements and suppositions of the framework?

Number	Open-Ended Question	Objective	Validation Aspect	Additional Topics Discussed
	suitable to achieve the desired outcomes?	choice of tools to achieve the theoretical objectives.		- Do you know of any better tools to use?
5	Do you believe the metaphor and framework will guide an SME to formulate strategies, which will improve their chances of survival and growth?	Whether the metaphor and framework succeeded in their intended purpose.	Achievement of the study's objective of supporting strategy formulation.	- If the framework will fail in its intended objective, why do you believe this will be the case? - Would you use the framework in the future?
6	Do you believe that strategies formulated through the use of the framework have a higher probability of being funded by venture capitalists?	Evaluate the applicability of the framework to SMEs with regard to obtaining VC funding.	Achievement of the study's objective to support the objective of obtaining VC funding.	- Do you believe in the intended objective of the framework?
7	Do you believe the framework is applicable to venture capitalists and may improve their decision making?	Evaluate whether the framework could contribute to the venture capitalists' own decision-making criteria and processes.	Contribution to venture capital decision-making criteria and processes.	- Would you be inclined to suggest the use of the framework to your investee companies?

- **Question 1:** Do you believe the metaphor is suitably appropriate to bring about understanding regarding the framework?

All of the experts believed that the metaphor was indeed suitably familiar with the intended audience, as much as any single metaphor could be expected to be, given the range of possible participants.

- **Follow up question:**

In light of the feedback, the following follow-up question was asked:

Do you know of a better metaphor to support the framework?

None of the experts could identify a better metaphor.

Dr DK stated:

> *"I believe finding a more optimum metaphor would be a foolish exercise, as no single metaphor would be able to satisfy all the possible backgrounds of the participants. This one works."*

- **Question 2:** Do you believe the metaphor brings about understanding with regard to the underlying theory?

The experts all responded that, in their opinion, the metaphor would allow the framework to be more easily understood. DK and VB pointed out that the metaphor would be a handy tool to support the facilitator, and that suitably experienced facilitators would be able to use the metaphor to great effect.

In the words of VB:

> *"A skilled facilitator should be able to use the metaphor to great effect to guide conversations and allow the participants to bring in their own experiences of*

camping and perhaps even expand upon the metaphor to bring across their own points to their colleagues."

- **Question 3:** Do you believe the inferred actions of the metaphor are aligned with the theoretical underpinnings of the framework?

All the domain experts believed that the core inferred actions of the metaphor associated with overcoming obstacles to obtain resources that would result in the individual's survival in the wild were suitable aligned with the theory, or as much as one could realistically expect from a single metaphor.

AN said:

"The metaphor gives me a wonderful reference point against which I can gauge actions. If you are not overcoming obstacles and evolving to survive, you will die and this is also the case in business."

- **Question 4:** Do you believe the suggested phases, stages and tools are suitable to achieve the desired outcomes?

The experts believed that the various phases and stages were suitably incremental and absorbable, and appropriately aligned with the underlying theory and that the tools would be able to answer the relevant stage and phase questions.

Dr DK replied:

"The choice of phases and tools breaks down the complex theoretical objectives into manageable parts, whilst the guiding questions sufficiently capture the intent of the underlying theories."

VB stated:

"You have chosen the right tools, as all of them will bring the team together, and allow them to address their own communication shortcomings by having to

visually illustrate what they mean. The tools will work well in a facilitated setting to bring about learning and teamwork."

Prof SB declared:

"From a theoretical perspective you have been able to synthesise a manageable framework, bringing together what we understand to be the best practices in strategy formulation. I believe SMEs will be able to use this to improve their businesses."

AN was not knowledgeable about all of the tools, but after an explanation of each and a follow-on question whether she would like to replace the tools with another tool, she confirmed that the tools were suitable to the intended purpose and that she did not believe they had to be replaced.

- **Question 5:** Do you believe the metaphor and framework will guide an SME to formulate strategies, which will improve their chances of survival and growth?

All of the experts believed that the metaphor and framework would improve an SME's chances of survival and success. However, Dr DK and VB proposed that, although the framework improved an SME's chances of survival and success, the degree of this success would be influenced and enhanced by the experience and ability of an appropriate facilitator.

Dr DK commented:

"This is an excellent starting point, as much as I have seen, which could only benefit from a skilled facilitator who can work [with] the metaphor and get the best out of the framework."

- **Follow-up question.**

As a follow-up question, Dr DK, VB and Prof SB were asked:

Do you believe formal training related to the framework and its underlying theory would supplant the impact of a facilitator?

Dr DK, VB and Prof SB believed that training in any form regarding the framework and its theory would be beneficial and would go towards supporting the successful use of the framework.

Prof SB elaborated:

> *"I don't know of any framework in its pictorial form, which can just be picked up and used without background as to its makeup and raison-d'être (reason for being). You will always need to be taught how to use the framework and the logic behind it. Even Porter's Five Forces model as 5 boxes needs explaining."*

- **Question 6:** Do you believe that strategies formulated through the use of the framework have a higher probability of being funded by venture capitalists?

Both BS and RD believed the framework did improve an SME's chance of obtaining funding, as the framework at its core was aligned with the venture capital process of evaluating risk; moreover, it subsequently aligns the thought processes of funders and SMEs, and ensures that the various decision criteria are addressed.

RD explained:

> *"In essence that is what we do… we assess the risks and whether the team can overcome them to make the business a success."*

BS added:

> *"A key consideration is the ability of the entrepreneur or management to intelligently discuss the risks associated with the business, as this demonstrates knowledge, experience and foresight. Your framework would allow them to do this by knowing what they have to know."*

BS elaborated:

> *"A management team will in all likelihood face unknown obstacles in developing the business, and their ability to demonstrate a means to address the known unknowns ('risks') informs my decision regarding the team's ability to address the unknown unknowns ('uncertainty'), which they will likely face, and therefore my willingness to back them with my funding."*

- **Question 7:** Do you believe the framework is applicable to venture capitalists and may improve their decision making?

Both BS and RD praised the framework for organising what was otherwise an intuitive and admittedly 'luck'-based industry process of trying to identify SMEs which might be successful. BS mentioned that the framework crystallises concepts, which to date have been intangible and inexplicable, yet intuitively in his mind, a reality he believes is faced by many venture capitalists. BS mentioned that, not only should venture capitalists seek to understand the framework for their own decision-making benefit, but their investee companies should also use the framework to address likely future strategizing efforts. Consequently, both BS and RD believed that the framework might improve VC decision making.

RD declared:

> *"I am going to use this to make my own decisions as well as explain to companies looking for funding why I can't back them at this moment, but if they were to go and address their risks as pointed out by the framework, they can come back."*

7.3.4 Case Study

With the theoretical validation bringing to light the concern surrounding practical implementation with regard to the users understanding the various theoretical concepts captured within the framework, it was decided that a practical case study be conducted to

review the ability to implement the framework. The following section will discuss the validation session held with a local company to evaluate the implantability of the framework.

7.3.4.1 Background

A case study was conducted on a small firm in the Western Cape of South Africa. The firm had been established in Cape Town, South Africa, in 2012, for the purpose of facilitating the investment of long-term capital in infrastructure projects in Southern Africa, with an initial focus on the renewable energy independent power producer procurement programme ("REIPPPP").

After initial success with a single pension fund client, the assets under management grew to R3 billion, with investments in 8 infrastructure projects via 12 investment transactions. However, the firm has had difficulty in achieving growth in 2018 and 2019, only completing one transaction in each year.

Having rapidly grown, the firm acquired additional assets with the original profits; however, stagnation was threatening the existence of the company in its current form. The company was believed to be representative of an SME, as it had limited access to resources, was encountering significant obstacles, and was currently facing a difficult task, i.e., being enterprising or entrepreneurial, as defined in Section 3.3.

Illustrated in Table 62 below are the salient figures associated with the company:

Table 62 - Illustrative Case Study Information

Industry	Asset management (Private Equity)
Number of employees	12
Turnover	R15 million

7.3.4.2 Construction of the Facilitation Session

The facilitation session was constructed in accordance with design thinking and innovation principles, as captured in the PhD study of Silje Friis (Friis, 2006) and successfully used by the

author to facilitate a number of strategy sessions as a consultant and business stakeholder in previous years.

Within each phase of the framework, the facilitation process comprised the two distinct phases of ideation and filtering to foster idea creation and prevent conflict. Within each stage of the framework, an 'inspirational' story or 'ice-breaker' was used to elicit ideas and support ideation. After the ideation phase, the participants were asked to elaborate on their ideas and contribute new ideas in a discussion forum, with the author as facilitator ensuring that each person contributed proportionally and that no single person dominated the session. Once the various ideas had been discussed, the participants were asked to filter the ideas and create a number of salient themes.

7.3.4.2.1 PERSONNEL AND ATTENDEES

The session was attended by 7 participants, namely: 2 non-executive directors as co-founders of the company, the CEO as third co-founder, the head of transacting, the head of investor relations, as well as 2 associates and 2 analysts. Experience in the broad industry ranged from 30 years to less than 2 years, with all of the participants having been with the company for more than 18 months. Although each employee had a title and designation, the size of the firm meant that all of the employees were exposed to all facets of the business, which included the following functions: raising funds, deploying funds via transactions, and managing the investment post transacting.

7.3.4.2.2 FRAMEWORK FACILITATION

Below are the key takeaways from each phase and stage within the framework.

WHY PHASE

- **Process:** Pursuant to explaining the framework, a discussion ensued among the participants, which resulted in a supposed epiphany among the participants related to knowledge being the deciding factor that affects the survival and success of the firm,

and the fact that successful strategy formation is the result of the pursuit of inculcating the correct knowledge among all stakeholders.

- **Individual:** The various participants agreed that their individual motivation was synonymous and ambitious: i.e. they aspired to establish the firm as an industry leader, which required commitment and recognition that the firm would have to take on external funding and/or form partnerships to achieve its goals; as a result, they would have to be accountable to and report to third parties, and moreover be comfortable with this.

- **Firm:** The individuals categorised their ideas according to the headings of 'why' (mission), 'how' (vision) and 'what' (values). The discussion that followed resulted in the participants determining a purpose not bound by the industries of 'infrastructure' or 'investing', but rather "making a difference to our own and other people's lives through a scientific approach of constant risk taking".

- The participants agreed that their unique background of engineering ("science"), finance and entrepreneurship was their key differentiator, and that this core DNA could be applied to a number of industries to establish new businesses and bring about change. Having defined the purpose of the firm, the participants determined the enabling functions (their vision of 'how') and factors (their values of 'what'), which would support the firm's purpose.

WHO PHASE

- **Core unmet need:** While working through the customer empathy map, it became apparent that there were discrepancies between the beliefs held to be true by the directors who were not involved with the day-to-day business and by those employees who were more regularly engaging with prospective clients.

  The employees revealed that (1) the ongoing payment of fees was a particular pain point for investors, (2) investors tended to only do business with people with whom

they had a relationship, and (3) the short investment meetings with clients were not sufficient to educate the client as to the legitimacy of the investment.

- **Competition:** With infrastructure being a relatively new asset class, competition was currently low; however, this was likely to change as the sector matures. From acquiring the assets, firms compete on price, speed of execution and access to funding. Large corporates who have the ability to undercut on price and have access to funding, are hamstrung however by red tape, which impedes their ability to conclude transactions quickly.

- **Future Scenarios:** After reviewing future scenarios, 3 core themes were agreed on: (1) Environmental concerns and a growing impetus for responsible investing would support the investment in renewable energy. (2) Similarly, there is already a push for investment funds to be aligned with the development initiatives of the country through the concept of prescribed assets, with infrastructure construction providing much needed unskilled jobs. (3) Finally, black economic empowerment (BEE) will become one of the defining considerations for funds when considering fund managers.

HOW PHASE

- **Core competency:** The participants concluded that the core competency be aligned with the firm's purpose, i.e., that of combining the fields of engineering (science) and finance to continually exploit opportunities.

- **Legitimacy**: Against the backdrop of the core unmet need and the engrained industry rules and norms, the participants concluded that legitimacy was a function of track record and size of the assets under management.

- **Business Model:** With the insights revealed through the various phases and stages of the framework, the participants concluded that the firm lacked a number of success factors, specifically in respect of knowledge regarding the customer, existing

relationships with pension funds and fund allocators, legitimacy in terms of a track record and sizeable assets under management, as well as BEE accreditation.

The participants brainstormed ideas to address these shortcomings and concluded that a partnership with an existing fund allocator or fund manager would result in a mutually beneficial relationship. For the firm, the benefits would include: access to 'cheap' funding with the firm's fees being rolled up into the fund's global fee structure already agreed upon with investors, legitimacy by association, and BEE accreditation as a result of the partners' existing BEE accreditation. The benefits to the partner would lie in obtaining a team with experience in the new industry rather than having to build it; moreover, the firm would be able to execute the transactions faster than the 'corporate' partner, and access to an alternative asset class track record.

- **Growth Stage:** The participants agreed that, with growth, the near-term obstacles would be to transfer the skills and experience of the incumbent team to the new members without creating red tape, which would affect the firm's ability to execute on transactions quickly. In order to overcome this, the team decided that hiring the correct personnel would be paramount to its success, as would be informal daily meetings, where new personnel would be encouraged to ask questions to leverage off the experience of the incumbent team.

WHEN PHASE

- The participants agreed that their core assumptions were: (1) that infrastructure as an asset class is an attractive investment opportunity for the industry, (2) that the core competency of the firm, i.e., the amalgamation of engineering and finance, is a suitable differentiator, and (3) that the larger fund managers should look to partner with smaller firms which the necessary team to take advantage of the opportunity.

WHAT PHASE

- In order to test the assumptions developed in the 'when' phase, it was suggested that the Directors and CEO make a list of desired partners to acquire and/or obtain a stake in the firm. These engagements with the desired partners would validate whether they considered the infrastructure asset class as an opportunity, whether the firm's core competency was desirable, and finally, that they wished to pursue the opportunity to enter into a partnership. In order to do this, several tasks with accompanying timelines were agreed upon to formulate the presentation and necessary documentation for the prospective partner to evaluate the partnership.

7.3.4.2.3 PARTICIPANT FEEDBACK

After the session was concluded, the participants were asked to complete a questionnaire and/or offer any additional comments regarding the framework and the strategy formulation session. The questionnaire was anonymously completed by the participants to limit any pressure and/or influence from the other participants.

As was the case with the semi-structured interview, the questions were designed by taking into account the considerations raised in Section 2.7.2.1. to develop the rationale listed in Table 63.

Table 63 - Case Study Validation Rationale

Question	Objective	Validation Aspect
1	Determine whether the framework adhered to the user requirements of being understandable, bringing about learning and suitably encouraging individual and group participation	Achievement of conceptual requirement objectives.

Question	Objective	Validation Aspect
2	Ascertain whether the metaphor suitably resonates with the participants.	Suitability of the metaphor.
3	Determine whether the participants believed in the results delivered through the use of the framework	Resonance of the framework with management.
4	Establish whether the framework fostered its continued use.	Continued use of the framework.
5	Encourage any additional comments regarding the participants' likes and dislikes regarding the framework and its use.	Practical implementation.

- **Question 1:** Do you believe the framework supports the user requirements of being understandable, bringing about learning and encouraging group and individual participation?

All of the respondents replied that they understood the framework and that the activities indeed encouraged and supported their participation. A number of participants praised the framework and its simplicity for bringing together what was otherwise a complex set of concepts.

One participant:

> *"I have been involved in numerous corporate strategy formulation sessions during my career. I found the approach refreshing and inviting, and appreciate the development of alignment from the individual to the firm."*

- **Question 2:** Could you identify with the metaphor, and did the inferred actions make suitable sense?

All of the respondents noted that they were familiar with camping and the concept of surviving in the wild, and that the metaphor and its inferred actions made sense.

One respondent noted:

> *"I had never realised the importance of the concept of knowledge and the impact this has on overcoming obstacles and attaining success, both in the wild and in business."*

Question 3: Do you believe the use of the framework and its results will improve your business's chances of survival and success?

All of the respondents noted that the use of the framework brought to light results that should bring about an improved probability of survival. Some of the respondents noted that they were unaware of some of the misconceptions and knowledge novelties (ignorance or lack of knowledge) revealed by the framework, and that they believed that addressing the issues revealed would lead to renewed success.

- **Question 4:** Would you use the framework in the future?

All of the participants felt that the company should use the framework in the future.

One of the respondents asserted:

> *"I believe the framework will optimise knowledge sharing and therefore will be a valuable tool to assist the firm's growth, especially in light of the knowledge transfer growth obstacles identified."*

- **Question 5:** Do you have any additional comments regarding the framework, i.e., your likes and dislikes?

Four of the participants commented that they liked how the framework organised the strategy formulation process and brought about understanding as to what the process was trying to achieve. Two respondents noted that they had enjoyed the session and would have liked to take more time to delve into each topic and the underlying theory more deeply. Some of the participant feedback includes:

> *"I have what one would imagine is a considerable depth of understanding regarding these topics, and yet none of my formal training to date, nor my experience nor any previous facilitated strategy formulation session I have attended has been able to succinctly bring across the building blocks of the firm and strategy, as the framework as."*

> *"I am particularly interested in the concept of knowledge being at the core of the firm and that this epiphany would have had a remarkable impact on my career and thought processes had I realised this earlier."*

> *"Although i believed the framework would be an invaluable tool for SMEs, I am unsure how it could be used in an environment beyond the number of participants of the day's session, as it would be difficult to review everyone's ideas."*

7.3.5 Validation Conclusion

In accordance with the validation requirement of Boehm (Boehm, 1984), the section above demonstrates that the framework does indeed accomplish its intended objective as summarised below:

- The framework synthesises the various theoretical elements which impact upon survival and growth and brings about understanding regarding their interaction and impact on strategic fit.

- The framework brings about understanding regarding the successful interplay between formal strategy formulation and continuous learning within the survival and growth framework, and seeks to bring about the discovery of knowledge, the identification of opportunities and

success factors, and the means to overcome obstacles to obtain the necessary success factors to achieve strategic fit and effectively execute upon an opportunity.

- The framework is aligned with venture capital decision criteria and supports an SME to obtain venture capital funding.

- The framework resonates with managers, is applicable to reality and is implementable.

7.4 Chapter Conclusion

The validation process entailed first determining whether the framework was built right and whether it adheres to the requirements from theory, before validating whether it was built for purpose. Validation was done by establishing whether the sub-frameworks and the dissertation's understanding of what was going on and why was correct, before determining (1) whether the ultimate framework will improve an SME's chances of survival and success, (2) whether the phases and stages were appropriate and whether the tools would address the relevant questions, and finally, (3) whether the framework is implementable.

Validation was completed via semi-structured interviews with domain experts, as well as a case study. The validation process via the interviews with domain experts did not reveal any critical shortcomings from a theoretical perspective, and the case study validated that a strategy formulation session could be held with the framework as the backbone architecture.

However, both the interview and the case study brought to light that a key determinant of the framework's success would be the ability of the participants to understand the underlying theory and concepts, and thus the facilitator's ability to create a good understanding, guide the use of the tools, and encourage group and individual participation.

The validation process confirmed that the framework's use of a metaphor should assist SME employees from various backgrounds, and with different levels of education and experience to understand the framework, and that it could be used as an effective tool by facilitators to address risk and formulate strategies that would improve an SME's chances of survival and success.

Part 4 – Solution

In accordance with the systems engineering methodology adopted for this dissertation, this final part of the document will present the findings of the study. For ease of reference, the methodology and progress of this dissertation is presented in Figure 65 below.

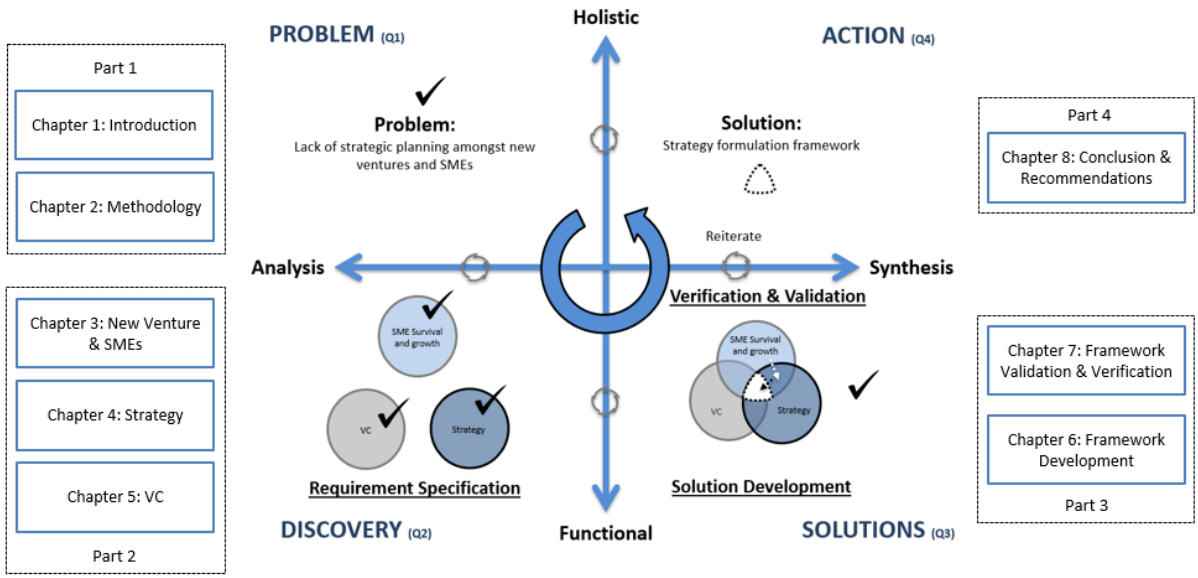


Figure 65 - Research Design & Document Layout

Chapter 8 – Conclusion

The purpose of this chapter is to reflect upon the study and review its findings to plot a future course that may further advance the field under consideration.

8.1 Overview

SMEs are key actors in socio-economic development in both developing and developed countries around the world; however, they face perilous odds in the quest for survival and growth, as they are hamstrung by uncertainty and a characteristic shortage of resources.

The objective of this study was to develop a framework, which would guide SMEs to formulate strategies and improve their chances of survival and success. Strategy formulation models and frameworks to date have been biased towards larger corporates, with those specifically aimed at SMEs failing to integrate the modern strategy perspectives, as well as not explicitly recognising the importance of knowledge development as the glue that binds the firm.

This study thus adopted an action research approach, which supported the objective of the study of developing a practical tool with real life application. The study utilised the systems engineering method to effect the framework development process and systems thinking methodology as a paradigm within action research.

The systems engineering method guided the study to develop a set of requirements and solution objectives, and consider additional design considerations which were grouped into 5 categories. From these categorisations, various solution conceptualisation were developed at increasing levels of detail to understand the nature and impact of the elements that affect SME survival and growth. The solution conceptualisations initially took the form of sub-frameworks which were verified and validated and incorporated into the final framework.

Three main research domains were reviewed for the study to develop the requirements and solution objectives. The study began by evaluating the factors that influence SME survival and growth, before focusing on the concept of strategy. The final domain reviewed was that of venture capital, in order to determine its suitability to SMEs and to identify the decision criteria of funders, whose financial support would allow SMEs to address some of their resource shortages.

The result of the study was the Cognitio framework, which seeks to explain the factors and their mode of impact on SME survival and success, as well as the required process of strategy formation to bring about knowledge and ultimately a high degree of strategic fit. The process of strategy formation is continuous, as SMEs periodically engage in activities and seek to answer the questions captured within the various phases and stages of the strategy formulation sub-framework, reviewing the evolution of the strategy as it is modified during daily operation.

Although all possible care was taken to make the framework and its success independent of the participants and the facilitator through the use of a suitable metaphor and the suggestion of relevant tools, the framework's success is subject to the ability of the facilitator to bring about understanding, foster and encourage individual and group participation, and ultimately develop the participants' abilities to find innovative means to address and overcome knowledge and resource shortcomings to bring about strategic fit, i.e., an improved adaptation to its internal and external context.

8.2 Methodology Execution

The study utilised the systems engineering approach as the method to execute the systems thinking methodology, an accepted way to perform action research. The systems engineering method utilised the primary research objective to develop the primary research question, which was subsequently broken down into sub-research questions, which in turn informed the required research domains and literature review. In the pursuit of answering the sub-research questions, framework requirements were developed. Employing the concept mapping method as the means of synthesis within the framework development process, the requirements were subsequently categorised at increasing levels of detail to bring about understanding and guide the construction of sub-frameworks, which combine to form the Cognitio framework.

Table 64 below references the relevant sections which address the sub-research questions and validate the primary research question to achieve the research objective.

Table 64 - Sub-Research Question Verification

CODE	Research Question	CODE	Objective/Solution	Section(s) Answered /Achieved
SRQ1	What constitutes a firm?	SRO1	Understand the theory that underpins our understanding of the firm and the firm's growth.	3.5.1
SRQ2	What influences a new venture and SME survival?	SRO2	Understand the issues affecting a new venture and SME survival.	3.7.1
SRQ3	What influences new venture and SME growth?	SRO3	Understand the issues affecting a new venture and SME growth.	3.8.1.1 & 3.9.6 & 3.10.1
SRQ4	How does strategy influence new venture and SME survival and growth?	SRO4	Introduce and understand the possible impact of formal strategy processes on a new venture and on SME survival and growth.	3.9.6 & 3.10.1

CODE	Research Question	CODE	Objective/Solution	Section(s) Answered /Achieved
SRQ5	What is strategy and what is strategic management?	SRO5	Define and understand the purpose of strategy and strategic management.	4.2.1 & 4.3.2 & 4.3.4
SRQ6	How are strategies formed?	SRO6	Understand how strategies are successfully formed.	4.3.4
SRQ7	Should SMEs formulate strategies?	SRO7	Define the supporting arguments related to formal strategy formulation in SMEs.	4.4.4
SRQ8	How are successful strategies formed in SMEs?	SRO8	Define the requirements for successful strategy formulation in SMEs.	4.5.4 & 4.6.1.4 & 4.6.2.4
SRQ9	What is VC?	SRO9	Introduce and define the purpose of VC.	5.3.3.1
SRQ10	How does VC affect new venture survival and SME growth?	SRO10	Understand the reason to support the use of VC.	5.4.6
SRQ11	What decision criteria influence VC decisions?	SRO11	Understand the decisions associated with awarding VC to new ventures and SMEs.	5.4.3
SRQ12	How are VC decision criteria aligned with the factors that influence SME survival and growth as well as successful strategies?	SRO12	Understand the alignment of VC decision criteria to the factors that influence SME survival and growth as well as successful strategies?	6.3.3.4

8.3 Results

The framework was validated via the use of three approaches to ensure that all aspects of the framework were addressed because, although the domain experts may have experience in all of the fields to some degree or another, none of them were experts in the combined fields or had suitable theoretical and practical experience in all of the fields.

1. The first approach utilised semi-structured interviews with domain experts to validate the dissertation's requirements and suppositions and the associated sub-frameworks that informed the ultimate framework.
2. The interviews revealed that, in alignment with the framework requirement of having to be easily understood by SME personnel, who have varying degrees of education and training, the framework also needed an effective means to communicate its underlying theory and execution to participants.
3. After incorporating the insights from the first round of interviews, the second round used follow-up interviews to validate the encompassing framework. The interviews validated the phases and stages of the ultimate framework as well as whether the suggested tools were suitable to achieve the desired outcome of the framework's sub-components.
4. The final form of validation occurred through an illustrative case study on a South African SME. The participants validated whether the framework resonated with them and was implementable by providing feedback that they understood the framework and appreciated the organised and easily 'digestible' nature of the underlying concepts and theory, that they believed in the results produced from the session, and ultimately that the use of the framework improved the probability of their SMEs' survival and growth.

The validation of the framework revealed that its ultimate success depends on the ability of the participants to understand the underlying theory and concepts, and the ability of the facilitator to support its effective use. Where the utmost care was taken to limit the effect of the ability of the facilitator and the participants on the framework's success, through the use of visual tools and a suitable metaphor, guaranteed success remains subject to a myriad of factors. It is however expected that the framework suitably integrates modern theory and best practice, and that it serves as an improved point of departure to formulate strategies that may improve an SME's chances of survival and growth.

8.4 Significance and Contribution

The primary contribution of this study is a solution to the problem identified in Section 1.3 in the form of a tool and language that resonates with managers, and that allows them to communicate and align their strategic efforts with the needs of partners and venture capitalists in order to improve their chances of acquiring much-needed financial and non-financial resources.

The theoretical contribution of the research is that the framework addresses the shortcomings of current strategic models by:

1. taking into consideration the perspectives, abilities and needs of the entrepreneur and/or management, as well as the specific characteristics of SMEs;
2. integrating the modern strategy perspectives of blue ocean, business model and customer perspectives into the strategy formulation process;
3. introducing the concept of legitimacy and its required development to obtain access to resources from internal and external stakeholders and to increase market adoption; and
4. explicitly recognising the role of knowledge, its absorption, development and understanding as the defining element, which determines the formulation of strategies that support SME survival and growth.

The framework may also have commercial potential as a management consulting tool, by allowing consultants to provide cost-effective strategy solutions to SMEs and entrepreneurs who do not have the financial resources to afford hiring costly consultation firms.

A further theoretical contribution is the extension of our current understanding of the role of strategy formulation in SMEs due to the extensive literature review. The integration of the relative fields furthermore increases our understanding of the factors that affect the integrative SME growth model proposed by Wiklund, et al., (2009) and the necessity to include the theory of the firm along with the extended concept of liability of newness with regard to (1) how knowledge is at the core of the firm and reduces novelty to bring about

strategic fit, and (2) how novelty is in constant flux, as new knowledge is required to deal with changing industry conditions.

The research also contributes to the current body of knowledge by proposing a metaphor that would allow non-technical managers and entrepreneurs with a limited understanding of strategy concepts to understand the various concepts and explain them to others in order to bring about strategic change. According to the author, no such metaphor has been proposed in the past, other than the organismic lifecycle metaphors that permeate SME and survival theory.

Despite impressive progress having been made with regard to understanding the decision making of venture capitalists over the past 40 years, studies have relied almost exclusively on *post hoc* research methods and experiments. The study therefore also contributes to the relatively under-researched field of "venture capital assessment of strategy" (Shepherd, et al., 2000) by reviewing whether VC decision criteria are aligned with strategy research, given that the primary aim is to construct successful strategies and not only strategies that are likely to receive VC approval.

The final contribution of the study is that of reviewing and validating the suitability of systems thinking as a research approach, and of systems engineering as a research method in supporting action research as a research paradigm, as well as facilitating grounded theory and framework building as research methods to conduct this study, in alignment with the co-operative enquiry methodology defined in Chapter 2.

8.5 Conclusion

The research was initiated by the author's background within the venture capital industry, with the author realising that (1) SMEs have a high failure rate, (2) SMEs often do not obtain venture capital funding and (3) venture capitalist provide funding based on intuitive decision criteria with varying degrees of success. Given the socio-economic importance of SMEs, the author set out to understand which elements, and of what nature and impact, affect SMEs, and whether a practical tool could improve an SME's chances of survival and growth.

The result of the study is the Cognitio framework, which as a practical tool is intended to allow SME management to conceptualise the factors that affect their survival and growth, and to formulate strategies and business models in alignment with the decision criteria of venture capitalists.

The strategy framework does not claim to guarantee success for either SMEs or venture capitalists. However, with the support of the validation process and in the opinion of domain experts, the framework does provide an improved strategic foundation from which SMEs and venture capitalists can review the factors that affect SME survival and growth as well as assess knowledge novelties and success criteria and develop suitable strategies to overcome obstacles.

In conclusion, the study realises that, as a conceptual framework, the framework contains a number of composite variables, i.e., variables that include a number of sub-elements and attributes, which as this point are undefined; however, the study also provides an important stepping stone towards developing an integrated understanding regarding the factors that affect (1) SME survival and growth and (2) successful strategy formulation in SMEs.

8.6 Future Work

The interrelated nature of the research domains provides for a number of interesting and valuable future studies. Research that could directly be applied to the refinement and advancement of the framework and the combined research domain includes:

1. Delineating the composite variables captured within the framework to produce more detailed sub-models and frameworks.
2. Determining which considerations and factors have the greatest utility and therefore require more attention, and whether focusing on these elements could reduce the complexity of the framework.
3. Reviewing the emergent strategy execution process to determine how strategies may be modified during implementation, in alignment with the factors that determine SME survival and growth.

4. Reviewing the tools suggested within the framework and developing new tools or determining the most optimal tools to be utilised.
5. Reviewing the various strategies, which have been used to overcome obstacles, and providing a reference guide to support innovative strategy formulation.
6. Developing upon the metaphor and/or creating a new metaphor to more optimally facilitate knowledge transfer and the use of the framework.

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Zott, C., Amit, R. & Massa, L., 2011. The business model: Recent developments and future research. *Journal of Management,* 37(4).

Appendix A – Publications

The following publications were published, in peer reviewed journals and a conference, during the tenure of the study.

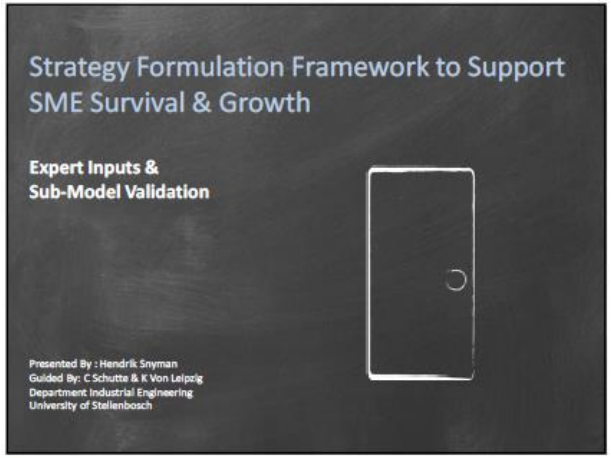
Snyman, HA., Kennon, D., Schutte, CSL., von Leipzig, K., Aug 2014, A strategic framework to utilise venture capital funding to develop manufacturing SMEs in South Africa, South African Journal of Industrial Engineering, Vol. 25, No. 2, pp. 161-181.

Snyman, HA., Kennon, D., Schutte, CSL., von Leipzig, K, Jul 2013. Formulating a strategic framework to promote SME development, SAIIE25 Conference Proceedings, 9–11 July 2013, Stellenbosch, South Africa, pp. 817: 1 – 20.

Appendix B – Interview Presentations

The following slides were used in the validation interviews related to the respective sub-frameworks.

Appendix B-1: SME Survival & Growth Presentation



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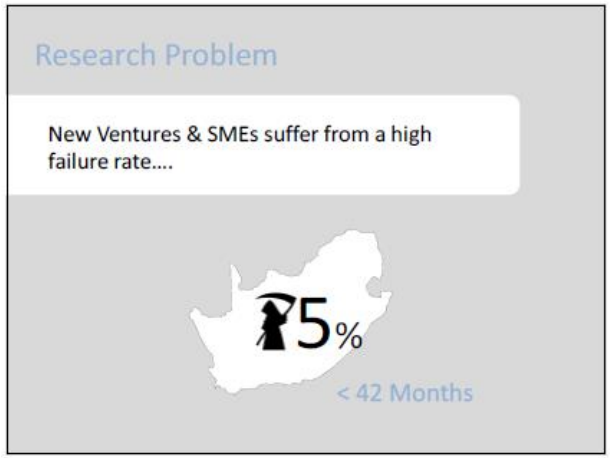

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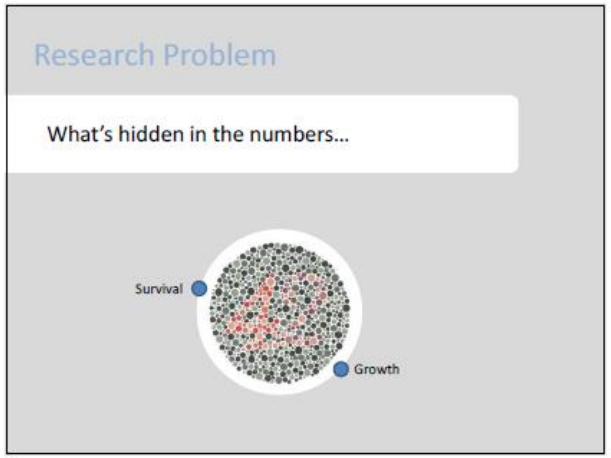


4

Research Question

How can an SME formulate a strategy to improve its chances of survival & growth?

Research Objective

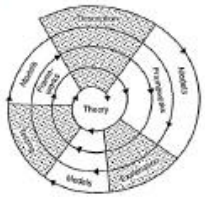
Develop a strategy formulation framework which supports SME survival & growth?

5

Interviewee Context

Framework

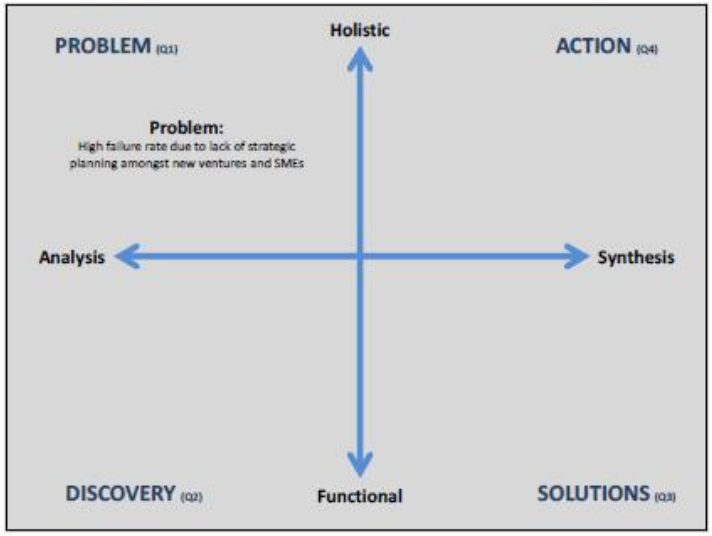
Descriptive Models ~ What impacts upon the phenomenon
Vs
Frameworks ~ Explain why
Vs
Theory



Requirements of Theory

- Supports prediction & understanding
- Applicable to reality
- Includes attributes & their interactions
- Does not include "composite" variables
- Includes boundary criteria

6



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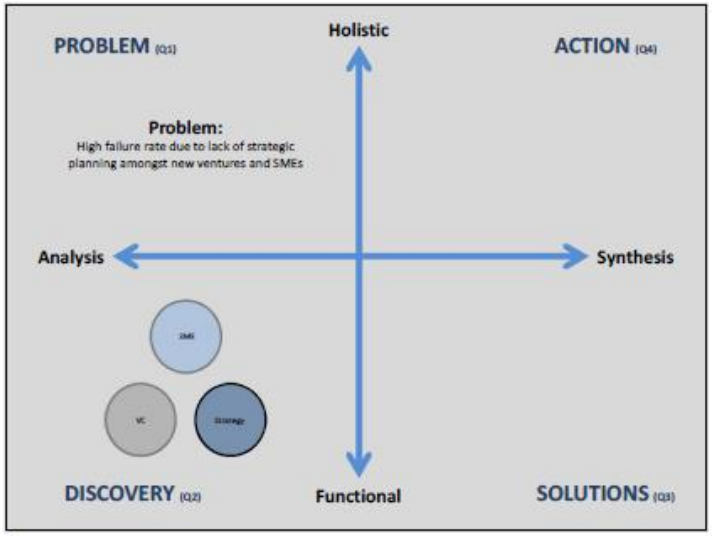

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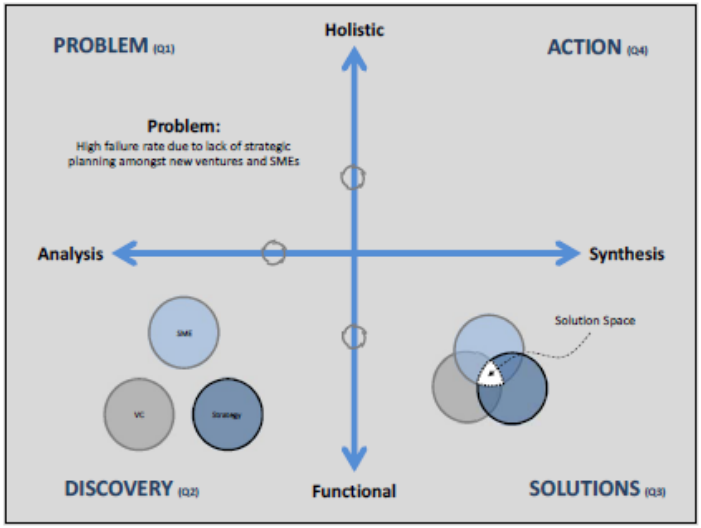

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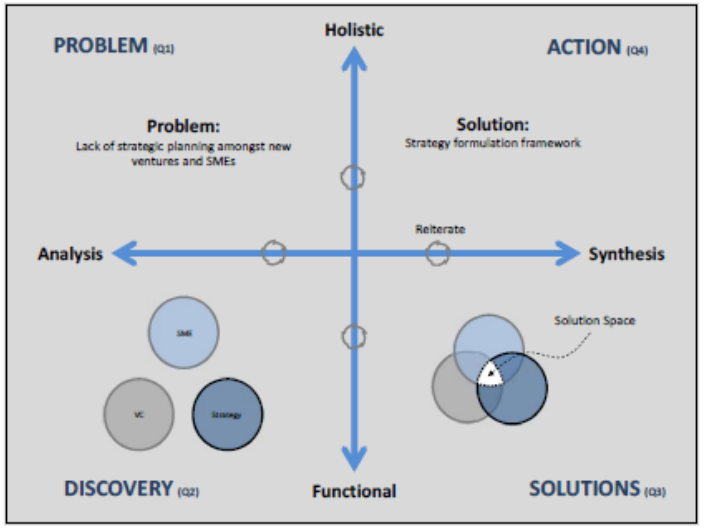

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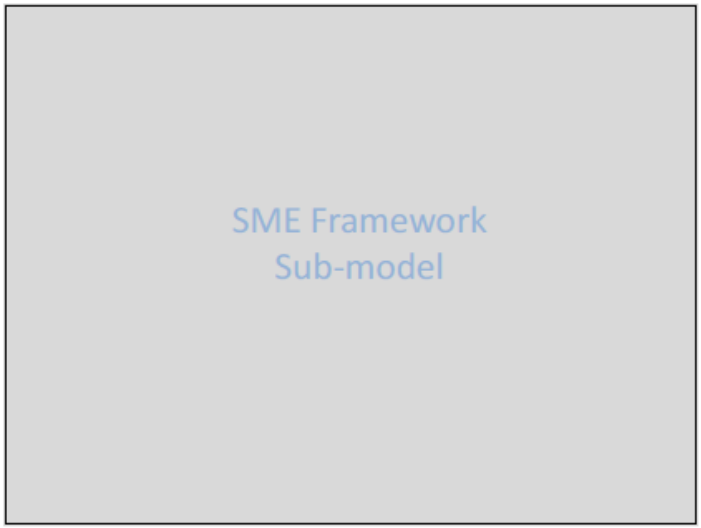

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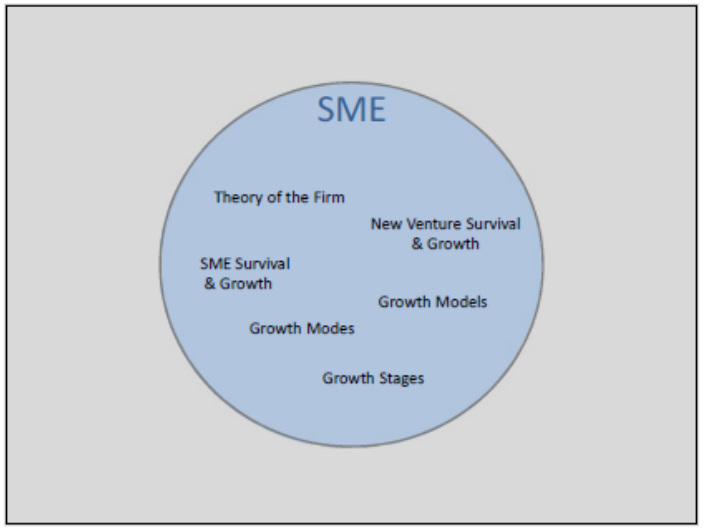


12

History of the firm

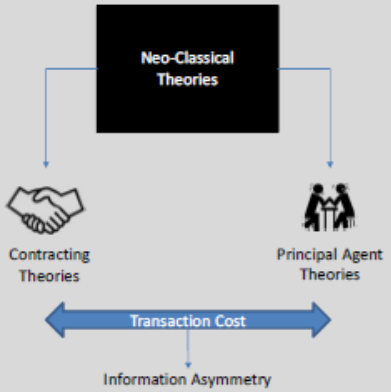
Neo-classical Theories

- Black box with resources & plans and perfect knowledge
- Behaviour is a function of supply & demand
- Customer – utility maximisation
- Manager – profit maximisation

H_0 = Theory true unless proven otherwise

13

History of the firm



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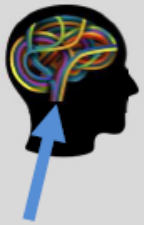
Modern Firm

Set of Resources ~ Knowledge at the Core



Pool of knowledge

Complex Cognitive Adaptive Systems

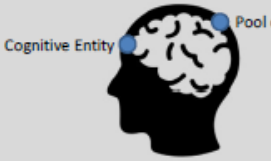
Learning

Order Vs Chaos

- Financial Assets
- Physical Assets
- Intangible Assets
- Intangible Knowledge

15

Modern Firm



Survival = Information Asymmetry

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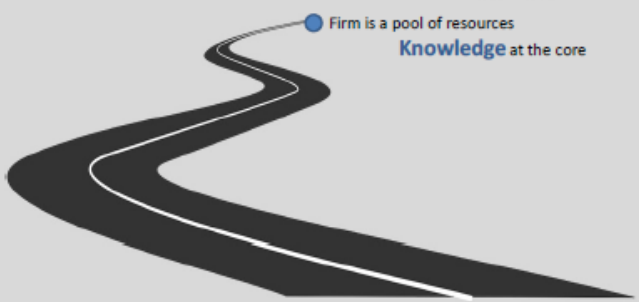
Journey of Realisation

- Firm is a pool of resources
- **Knowledge** at the core



17

New Venture Survival

Survival contingent on gaining access to success factors

Resources

- Financial Assets
- Physical Assets
- Intangible Assets
- Intangible Knowledge

18

New Venture Survival

Liability of Newness

Definition: Degree of novelty (ignorance and or lack of knowledge) associated with the new venture.

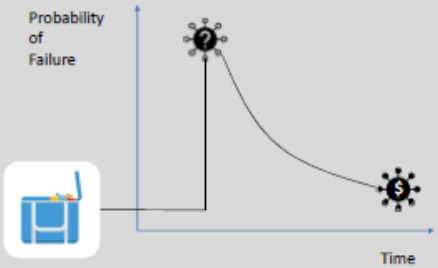
3 Dimensions

- *Market*
- *Production*
- *Management*

19

New Venture Survival

Risk of Failure associated with lack of resources



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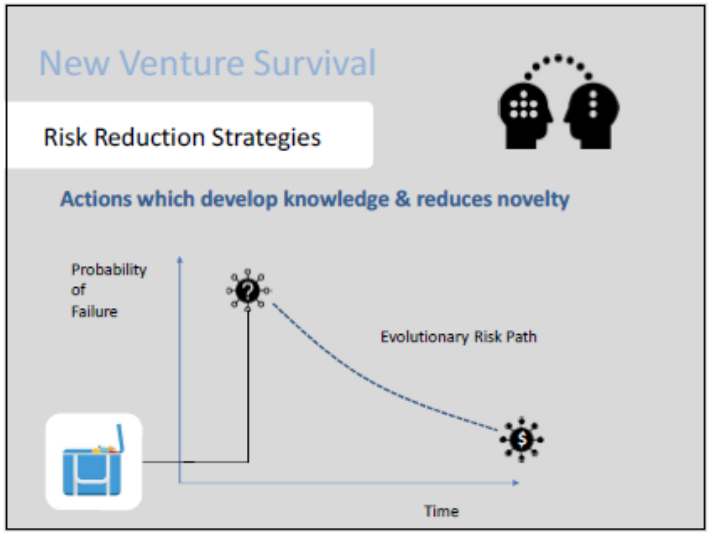

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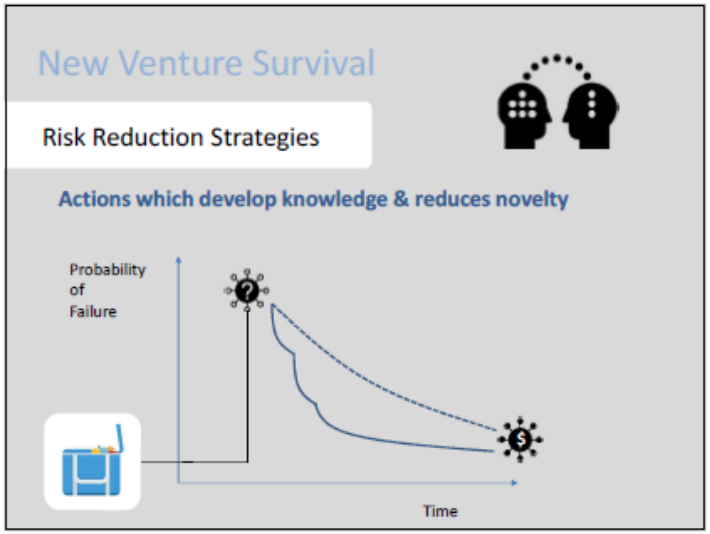

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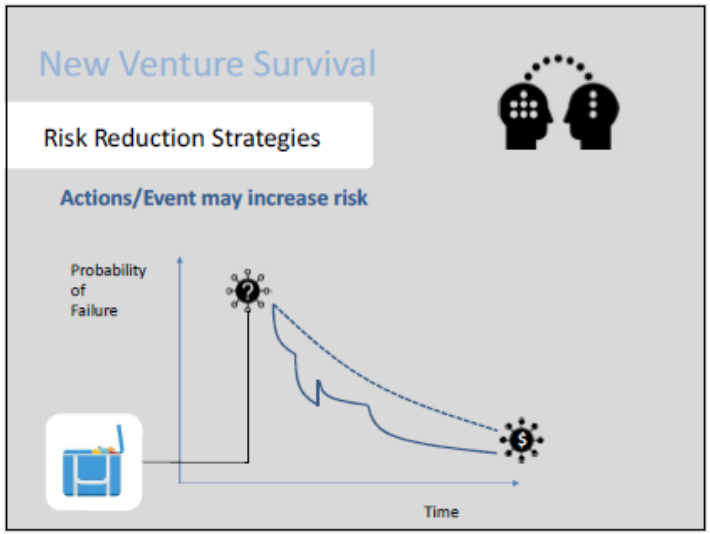

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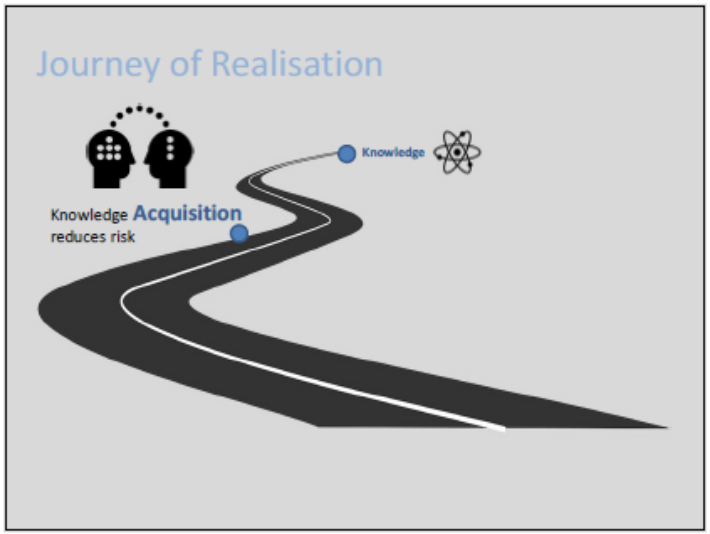


24

SME Survival & Growth

Number of factors

- External
  - Market
  - Access to Resources
  - Barriers
- Internal
  - Entrepreneur Aspects
  - Firm Aspects
  - Strategy

Lack of integrative models

25

SME Survival & Growth

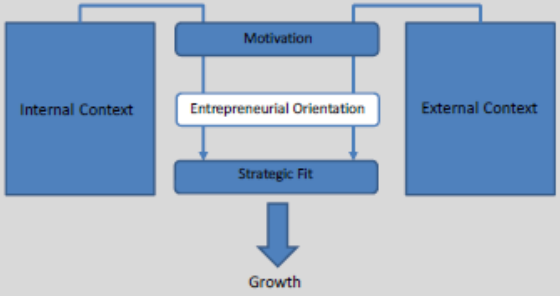
SMEs complex adaptive systems

- Order Vs Chaos
- Order < Adaptation < learning
- Degree of Adaptation = Fitness = Survival
- Patterning

26

SME Survival & Growth

Model of Growth



27

Journey of Realisation

28

SME Survival & Growth

Modes of Growth

Organic Local Growth

Vs

International Joint Venture Acquisition

29

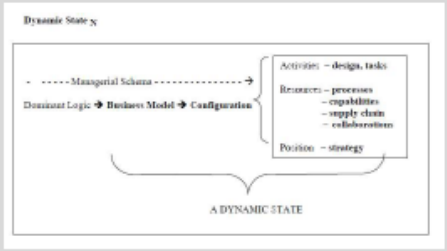
Journey of Realisation

30

SME Survival & Growth

Growth Stages

During an SME's life a certain set of 'knowable' (patterned) obstacles will have to be overcome, power lies identification and overcoming obstacles.



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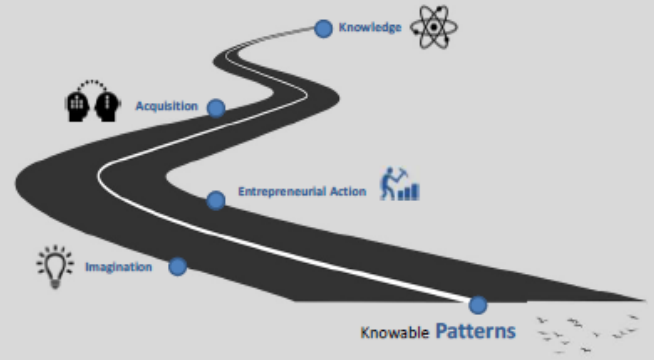
Journey of Realisation



32

Framework

"We all need frameworks and categories in which to store the confusing set of experiences that the world throws at us. That is what theory is. Without it, we would simply be overwhelmed and paralyzed"

Mintzberg and Quinn's (1992)

Goal

- Outline elements & Interaction
- Explanatory power
- Support Understanding

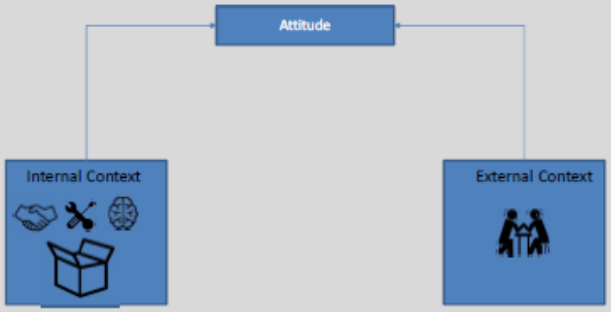
33

Framework Requirements

Survival	Growth
Opportunity asymmetry knowledge	Scaling knowledge
Market adoption knowledge	Growth knowledge
Execution asymmetry knowledge	Opportunity recognition knowledge
Resource knowledge	Expansion knowledge
Partner knowledge	
Absorption knowledge	

34

Sub-Model



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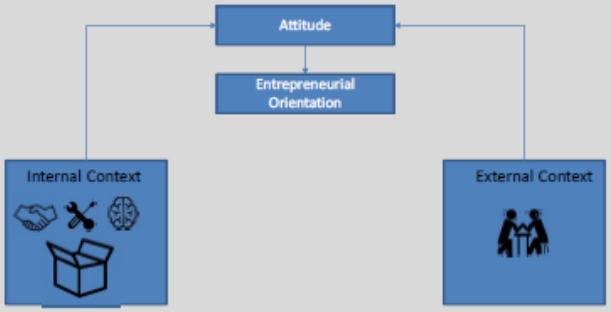
Sub-Model



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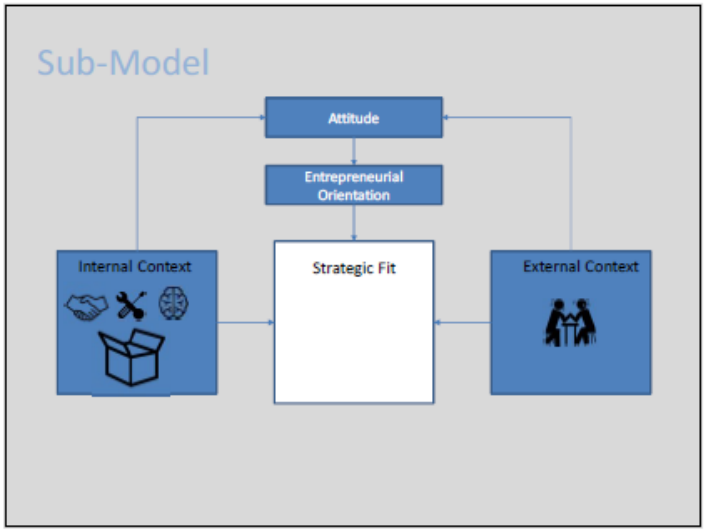

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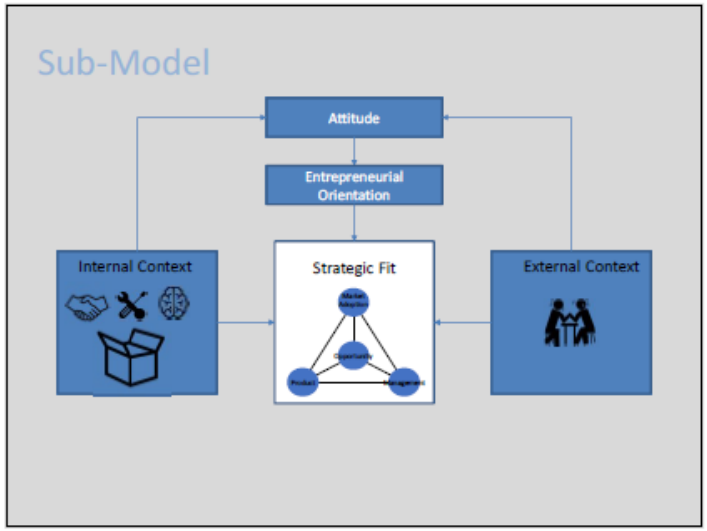

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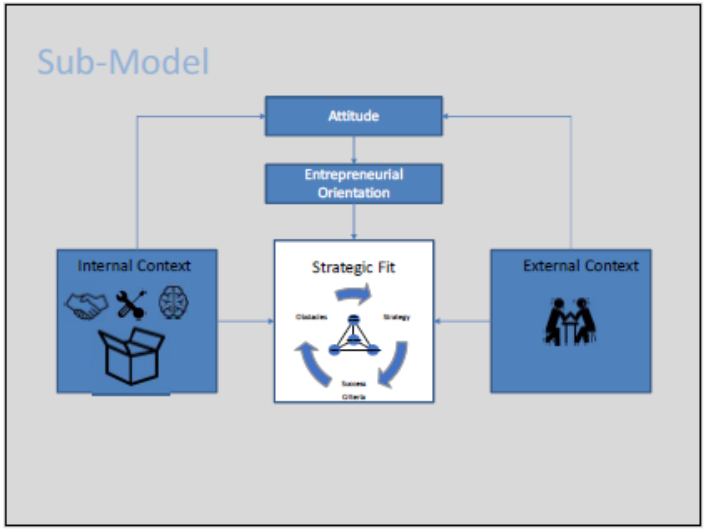

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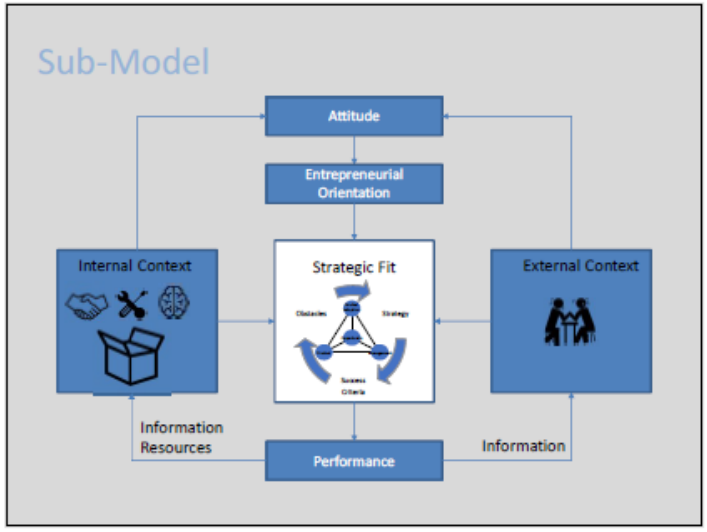

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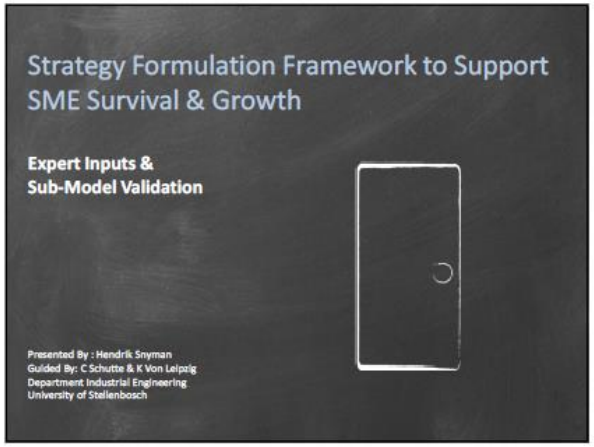
Validation Questions

1) Do you have previous experience with SME survival and growth models/frameworks?
2) Does this framework bring about an improved understanding of the factors that influence SME survival and growth, and the interactions of these factors?
3) Is there any other framework that you know of that better explains SME survival and growth?
4) Where do you believe the framework falls short of its objective?
5) Do you believe the framework will support strategy formulation efforts and subsequent survival and growth?

41

Appendix B-2: Strategy Formation & Formulation



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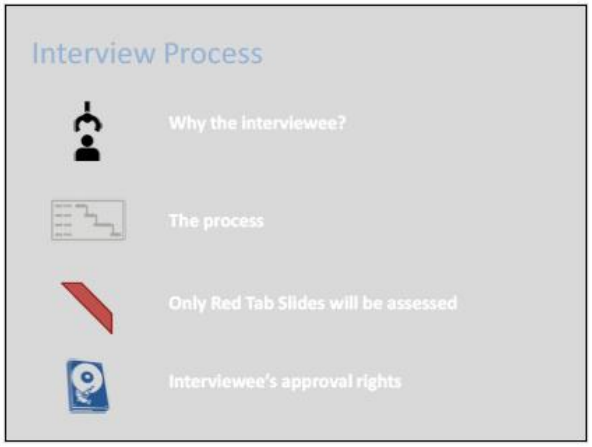

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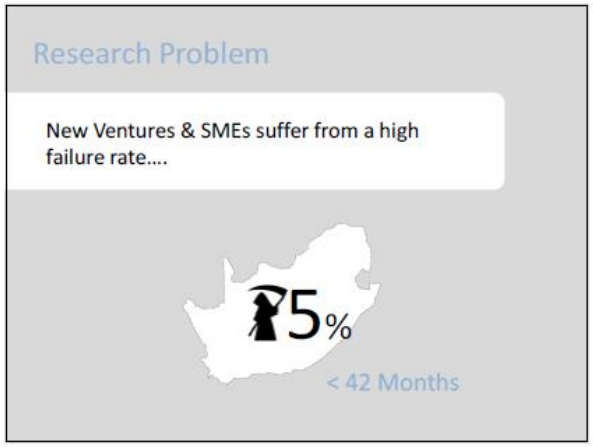

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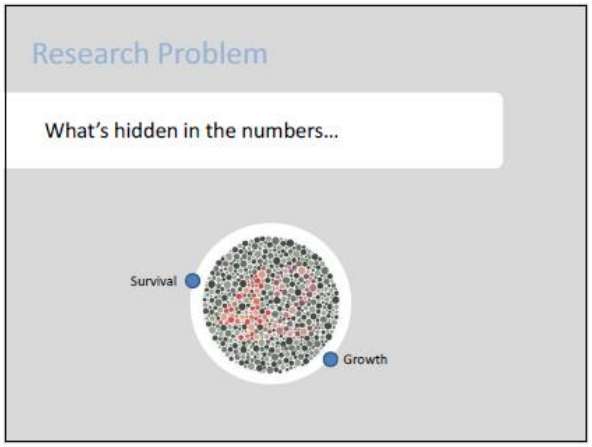


4

Research Question

How can an SME formulate a strategy to improve its chances of survival & growth?

Research Objective

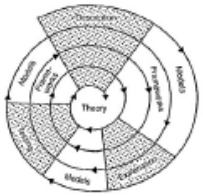
Develop a strategy formulation framework which supports SME survival & growth?

5

Interviewee Context

Framework

Descriptive Models ~ What impacts upon the phenomenon
Vs
Frameworks ~ Explain why
Vs
Theory



Requirements of Theory

- Supports prediction & understanding
- Applicable to reality
- Includes attributes & their interactions
- Does not include "composite" variables
- Includes boundary criteria

6

Framework

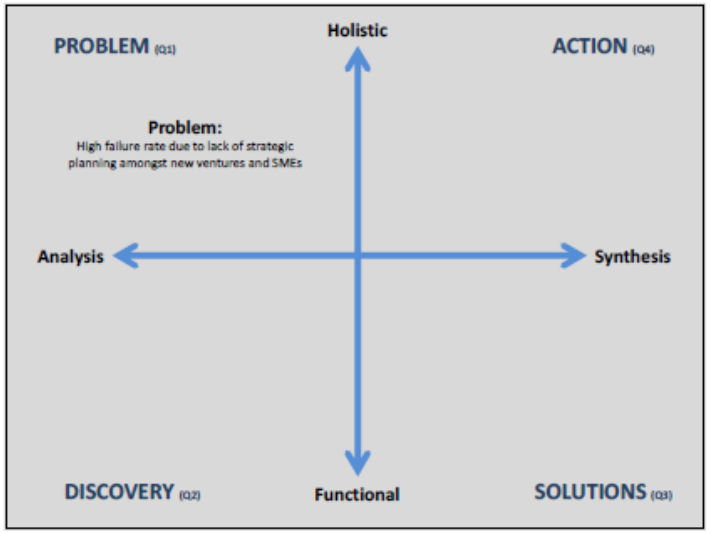
"We all need frameworks and categories in which to store the confusing set of experiences that the world throws at us. That is what theory is. Without it, we would simply be overwhelmed and paralyzed"

Mintzberg and Quinn's (1992)

Goal

- Outline elements & Interaction
- Explanatory power
- Support Understanding

7



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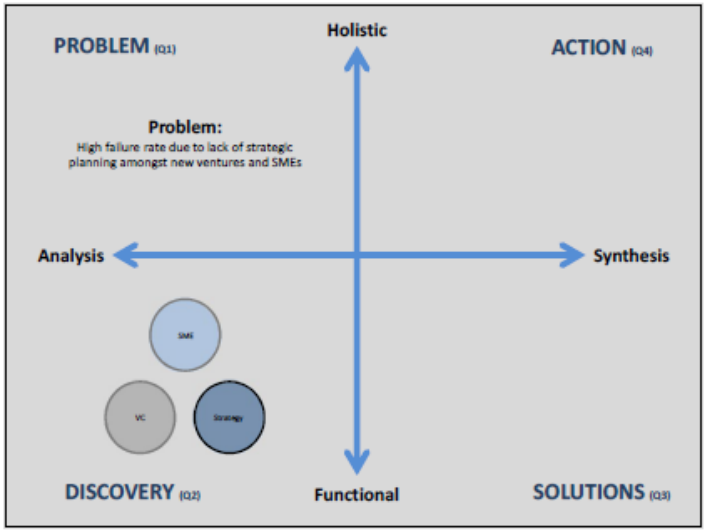

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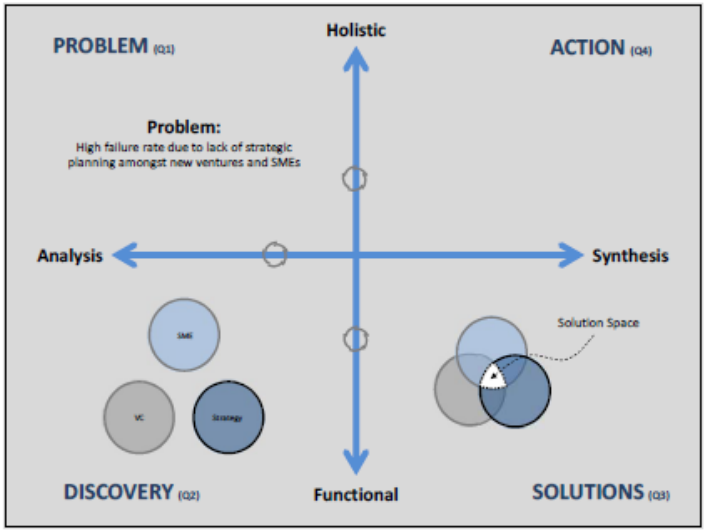

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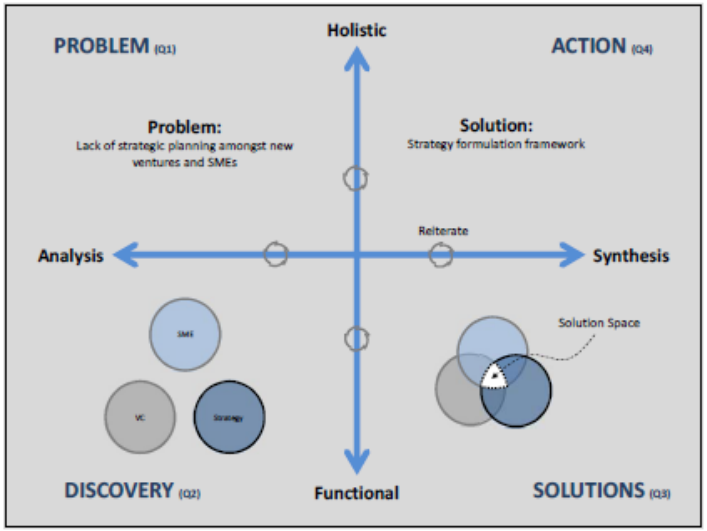

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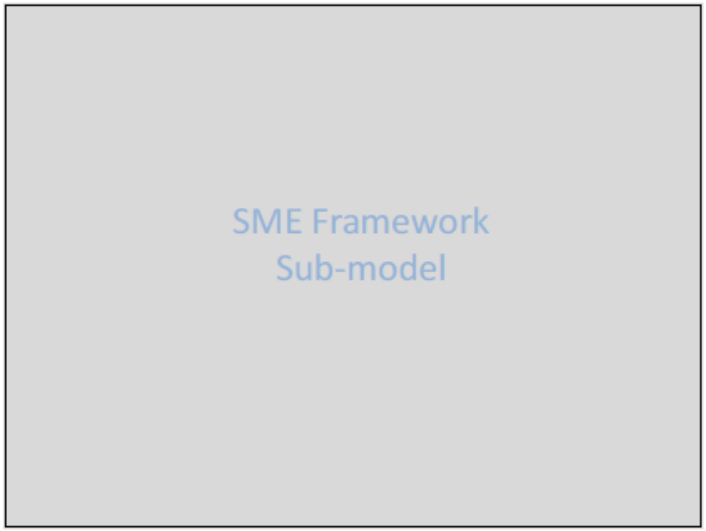

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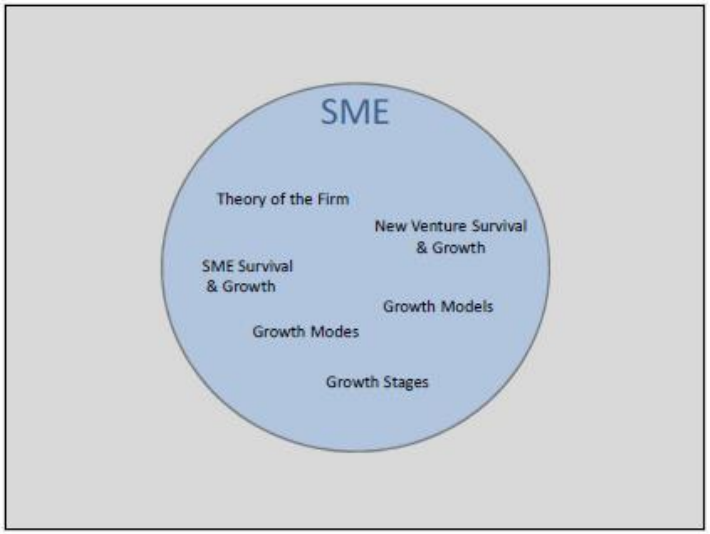

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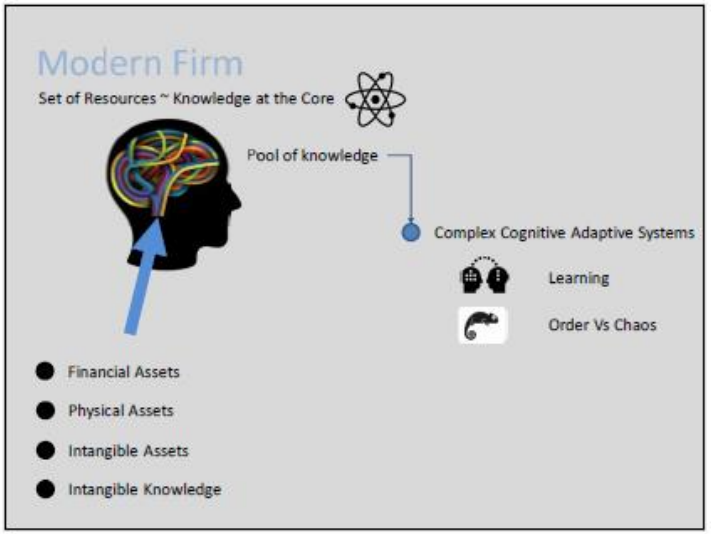

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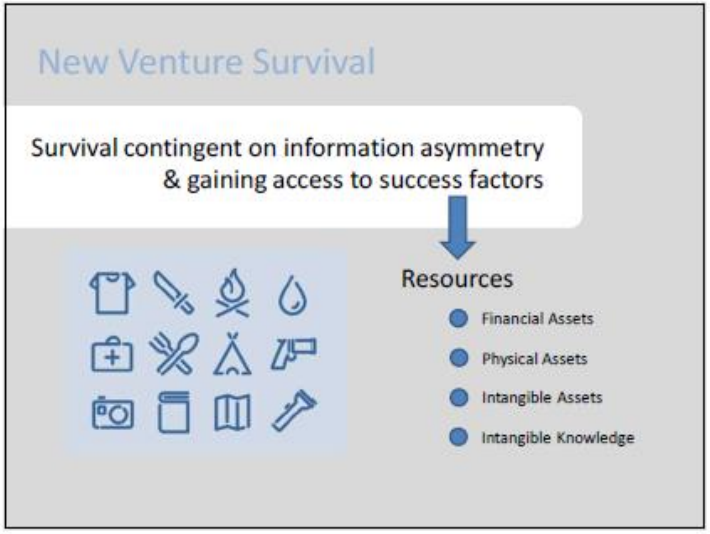

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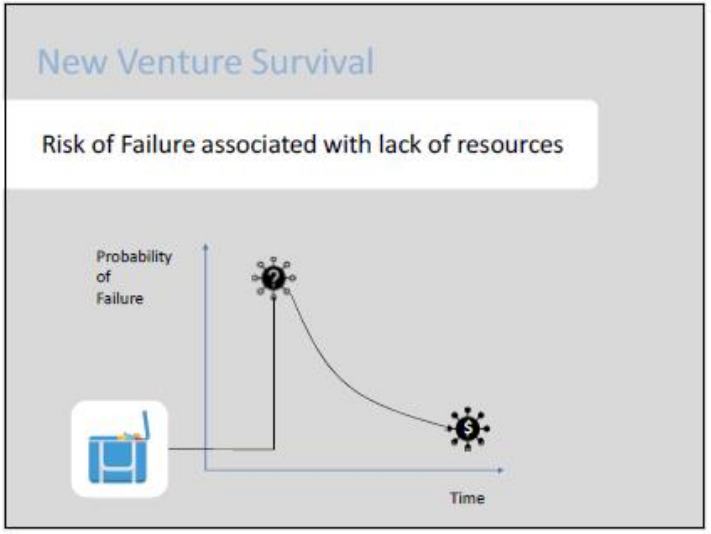


16

New Venture Survival

Liability of Newness

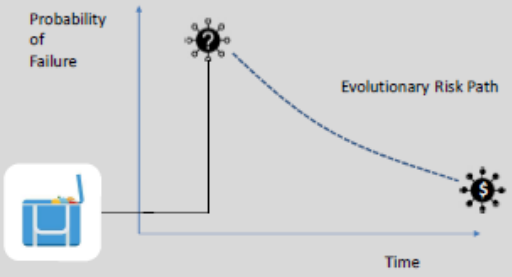
Definition: Degree of novelty (ignorance and or lack of knowledge) associated with the new venture.

3 Dimensions

- *Market*
- *Production*
- *Management*

17

New Venture Survival



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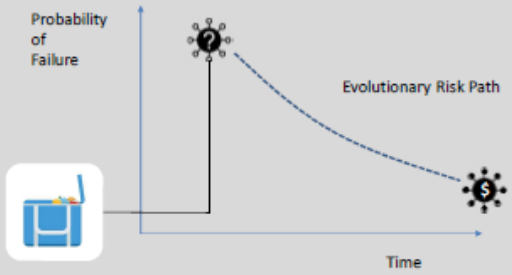
New Venture Survival

Risk Reduction Strategies

Actions which develop knowledge & reduces novelty



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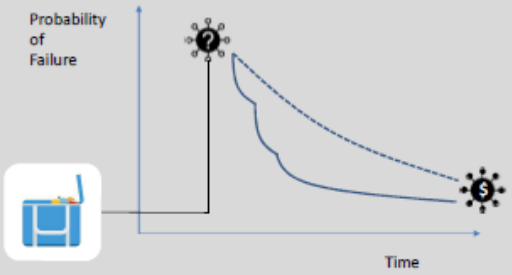
New Venture Survival

Risk Reduction Strategies

Actions which develop knowledge & reduces novelty



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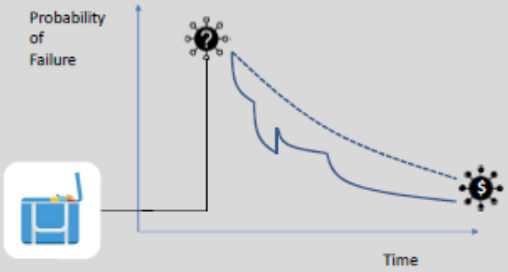
New Venture Survival

Risk Reduction Strategies

Actions which develop knowledge & reduces novelty



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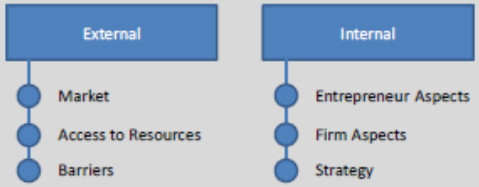
SME Survival & Growth

Number of factors



Lack of integrative models

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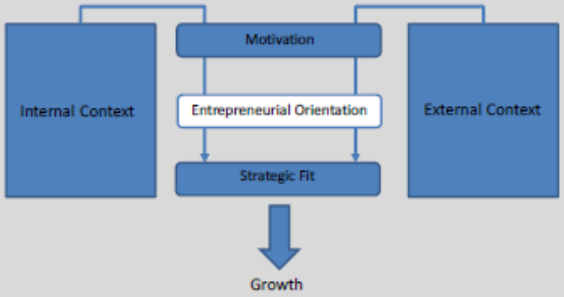
SME Survival & Growth

Model of Growth



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SME Survival & Growth

Modes of Growth

Organic Local Growth

Vs

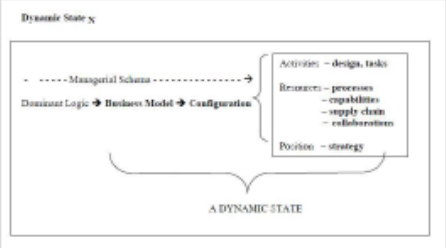
International Joint Venture Acquisition

24

SME Survival & Growth

Growth Stages

During an SME's life a certain set of 'knowable' (patterned) obstacles will have to be overcome, power lies identification and overcoming obstacles.



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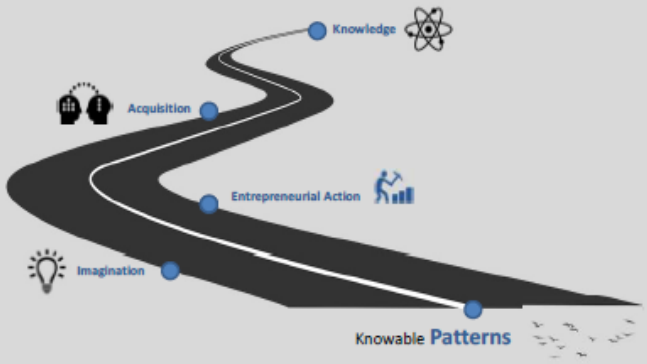
Journey of Realisation



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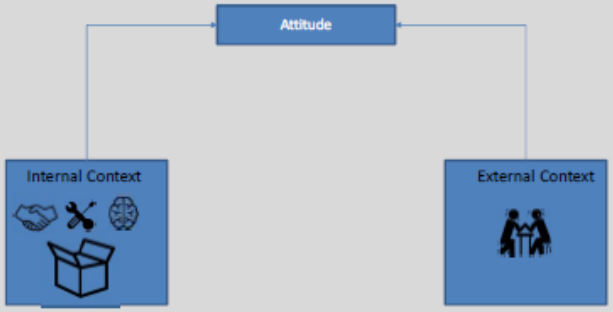
Sub-Model



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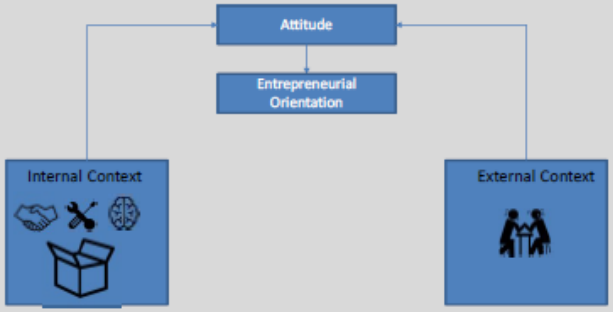
Sub-Model



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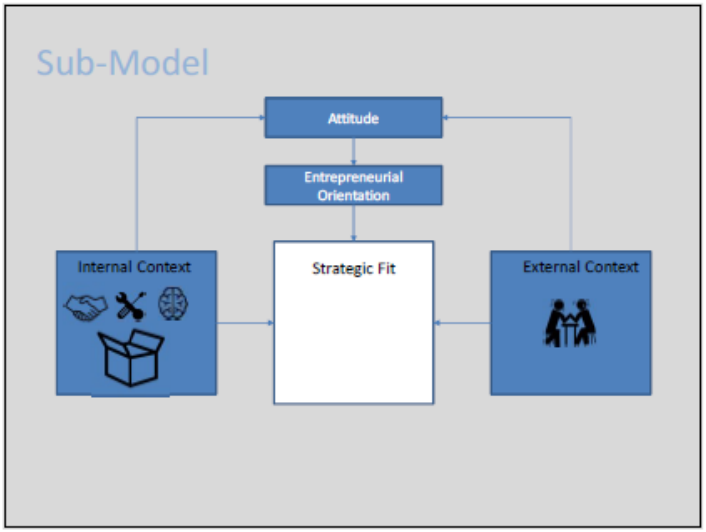

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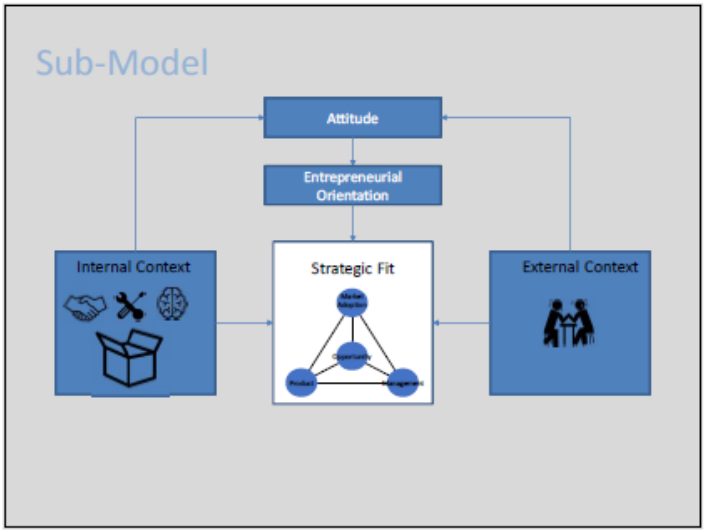

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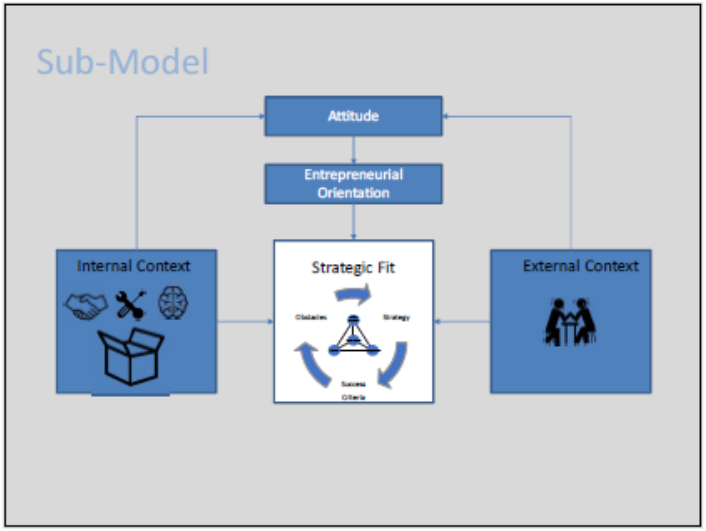

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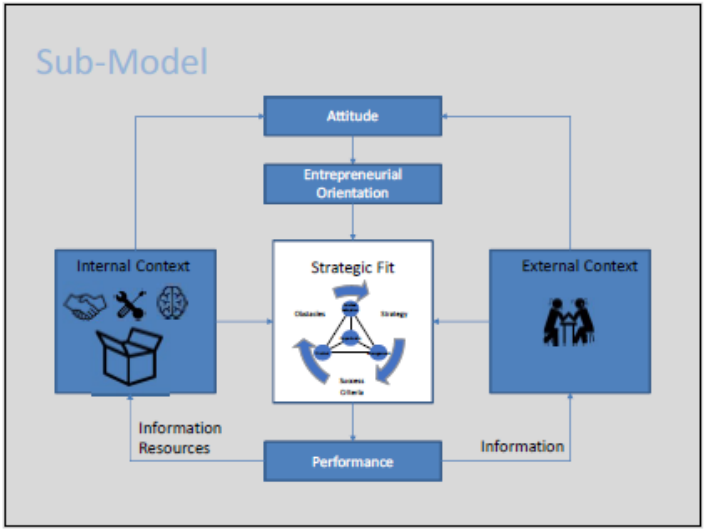

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Strategy
Sub-model

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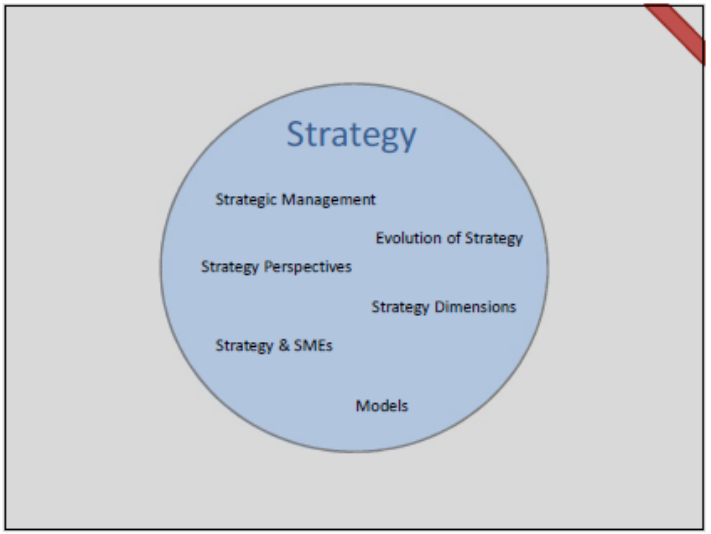

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Strategic Management

Goal

Strategic & Operational Leadership via 3 activities

- Design
- Develop

Existing & New Success Potentials

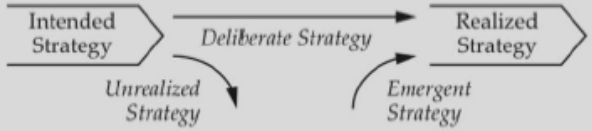
- Direct

Meet Demands & Success Measures

35

Strategy

- Plan
- Process



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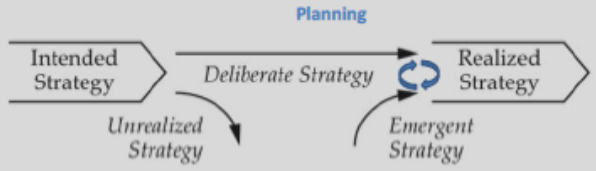
Strategy

- Plan
- \+
- Process
- = **Strategy Formation**



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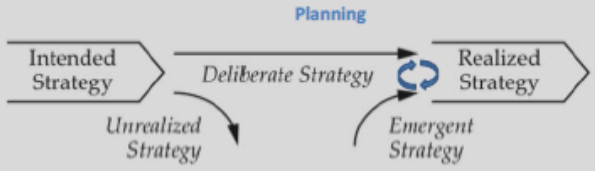
Strategy

- Plan → **Strategic Leadership** — Success Potentials
- \+
- Process → **Operational Leadership** — What works & What Doesn't
- = **Strategy Formation**



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Strategy Dimensions

Potter Metaphor

"managers are craftsmen and strategy is their clay. Like the potter they sit between the past of corporate capabilities and a future of market opportunities. And if they are truly craftsmen, they bring to their work an equally intimate knowledge of the materials at hand. This is the essence of crafting strategy" (Mintzberg, in HBR, 1987, P. 66).

- Purpose
- Context
- Process
- Content

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Successful Strategy Formation

How do you create successful strategies?

- Combine Deliberate & Emergent Approaches
- Specifically incorporates Political, Social & Learning perspectives

- **Strategy as Practice**
  - Practitioners
  - Practices
  - Praxis

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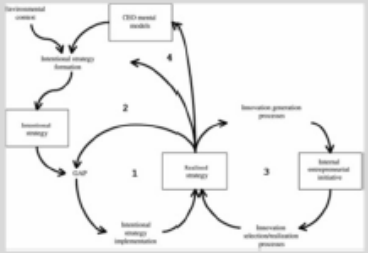
Strategy as Practice



1. Strategy Control
2. Strategy Formulation
3. Entrepreneurial
4. Mental Model

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Strategy & SMEs

Strategic Imperatives of SMEs

- Flexibility & Responsiveness
- Pursuit of Opportunities
- Risk Taking
- Innovation
- Decision Making
- Resource Allocation
- Operational Focus

Communication
Co-ordination
Opportunity Identification
Corporate Action
Resource Efficiency
Decision Support

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Strategy Perspectives

2 Schools

Rent Creation | Rent Appropriation

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Strategy Perspectives

2 Schools

Rent Creation | Rent Appropriation

Positioning

Resource Based View

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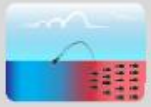
Strategy Perspectives

2 Schools

Rent Creation | Rent Appropriation

Blue Ocean Strategy | Positioning



Dynamic Capabilities | Resource Based View

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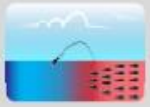
Strategy Perspectives

2 Schools

Rent Creation | Rent Appropriation

Outside

Blue Ocean Strategy | Positioning



Inside

Dynamic Capabilities | Resource Based View

46

Strategy Perspectives

What about the customer?

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Business Model

The Debate

Strategy

- Ignores Competition (Context & Purpose)

Business Model

- Addresses Content & Process

Link Deliberate & Emergent & aid strategy formation

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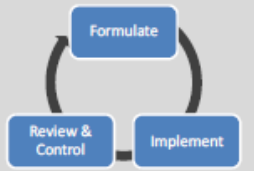
Strategy Process

- Analyse External Environment
- Analyse Internal Capabilities & Core Competencies
- Evaluate Opportunities
- Make Strategic Choice
- Define grand strategy & goals
- Define short term objectives, targets & action plans



- Gather feedback from strategic actions
- Revise strategy
- Appraise, test & reconcile strategy with functional plans & needs
- Modify goals if required

- Allocate resources
- Planning & budgeting
- Workforce alignment
- Institutionalise strategy
- Communicate
- Manage strategic change & embed strategy

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Framework Recap

"We all need frameworks and categories in which to store the confusing set of experiences that the world throws at us. That is what theory is. Without it, we would simply be overwhelmed and paralyzed"

Mintzberg and Quinn's (1992)

Goal

- Outline elements & Interaction
- Explanatory power
- Support Understanding

50

Framework Requirements

- Design, Direct & Develop
- Formulation & Realisation
- People, Praxis, Practices
- Purpose, Process, Context, Content
- Address Risk & Success Criteria
- Strategy Perspectives
- Communicable
- Assessment

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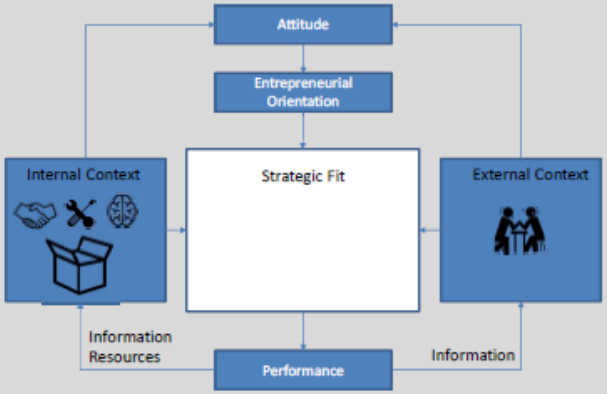
Sub-Model



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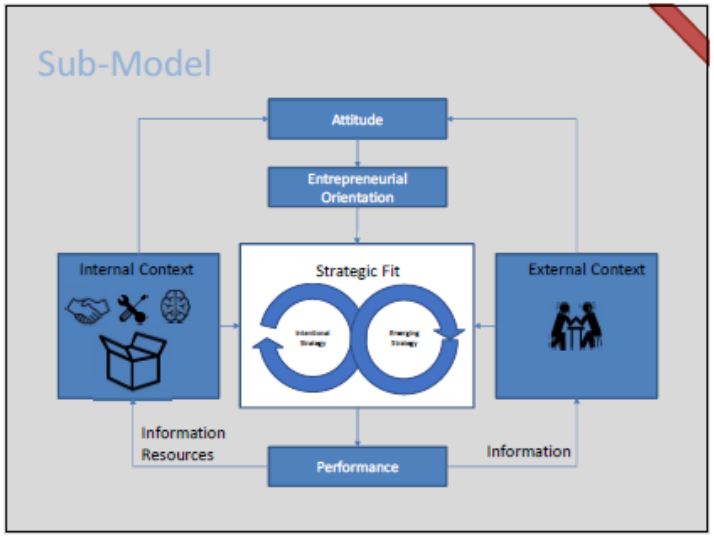

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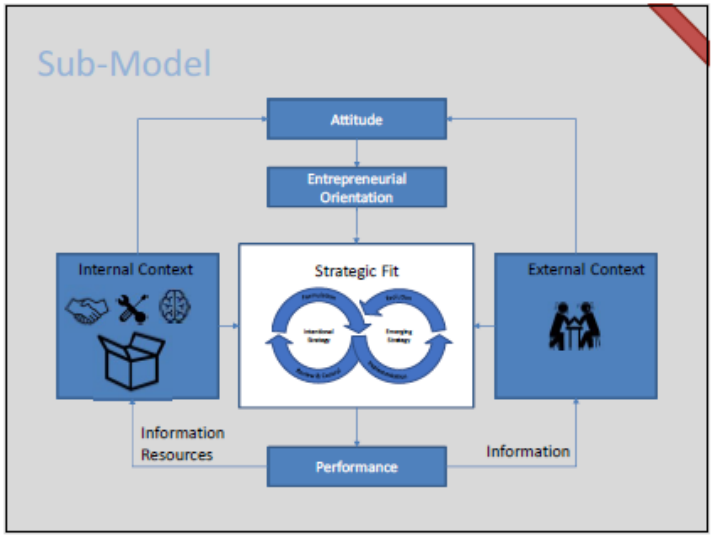

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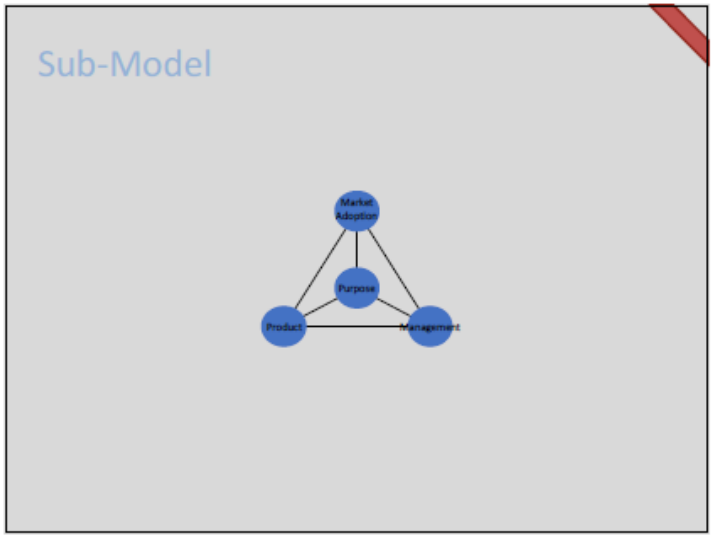

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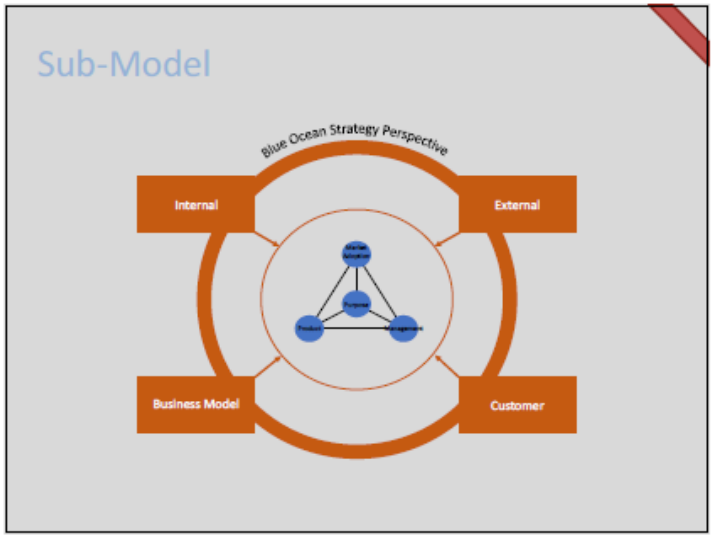

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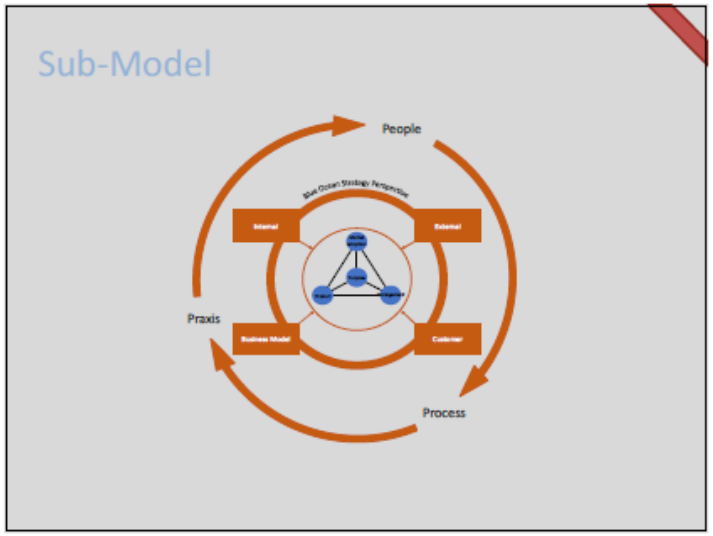

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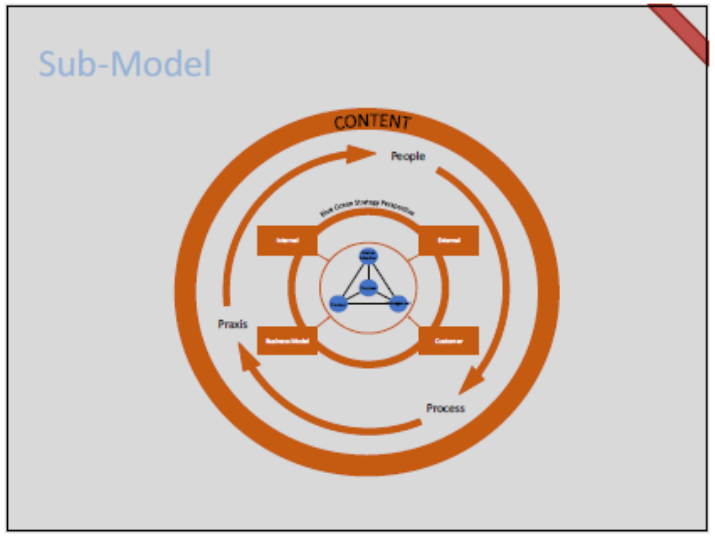

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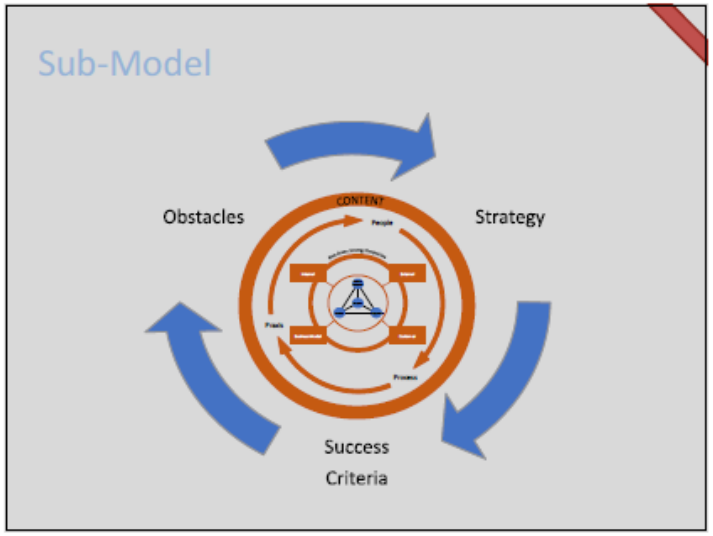

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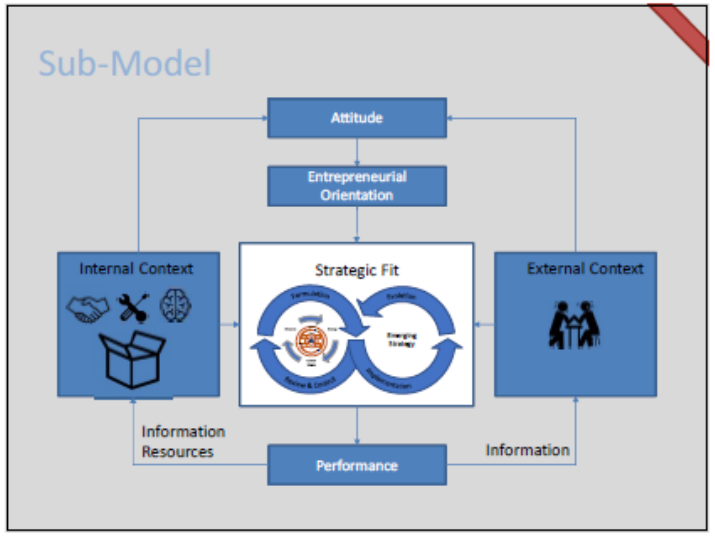

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Validation Questions

1) Do you have previous experience with SME strategy models/frameworks?
2) Does this sub-model framework bring about improved understanding regarding the factors and their interactions that affect SME survival and growth, as well as the process of strategy formation and formulation?
3) Is there any other framework that you know of that better explains the SME strategy interaction?
4) Where do you believe the sub-framework falls short of its objective?
5) Do you believe the sub-framework will support strategy formulation efforts and subsequent survival and growth?

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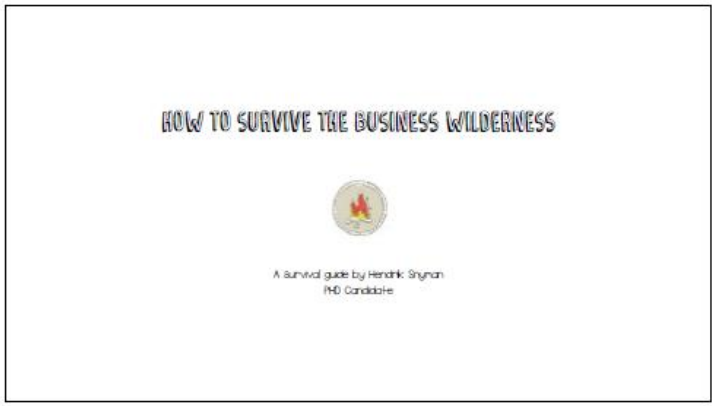
Appendix B-3: Practical Framework



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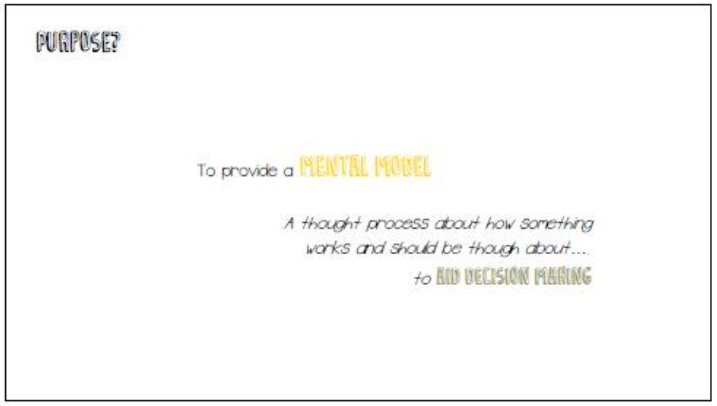

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4

WHAT CONSTITUTES A BUSINESS?

A business is made up of a **POOL OF RESOURCES** with **KNOWLEDGE AT THE CORE**

5

The firm constitutes a **POOL OF RESOURCES**

- Financial Assets: Money & similar instruments
- Tangible Assets: Physical assets which has value to the firm
- Intangible Assets: Non-physical assets which has a tangible value e.g. patents & contracts
- Intangible Resources: Non-physical resources difficult to place a value on e.g. relationships, capabilities

KNOWLEDGE regarding the combination and exploitation of the pool of resources is the **'GLUE'** that defines the firm

6

SURVIVAL & GROWTH DEPENDS ON:

STRATEGIC FIT: Degree of adaptation to the environment

Requires:

Knowledge - **knowing what others don't** - about:

The Opportunity
Utilisation of resources
Overcoming obstacles
Obtaining success factors

7

Survival and growth is function of **STRATEGIC FIT** i.e. the degree of match between the internal and external contexts of the firm

With internal & external contexts constantly changing the firm continually has to adapt..... **STRATEGIC FIT IS IN CONSTANT FLUX**

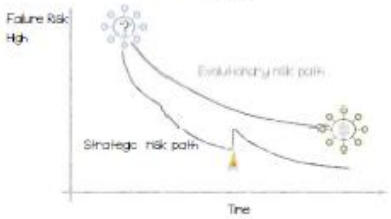
Strategic fit is supported by the pursuit of knowledge and information asymmetry, **knowing what others don't**, related to the opportunity, the effective utilisation of resources to build capabilities and competencies and the means to overcome knowledge and resource shortcomings and obtain the necessary success factors

8

ENTREPRENEURIAL ACTIONS & RISK REDUCTION STRATEGIES

SURVIVAL DEPENDS ON
Knowledge absorption

ENTREPRENEURIAL ACTIONS
Active measures to overcome novelty - ignorance or lack of knowledge



RISK REDUCTION STRATEGIES
Are not absolute

9

SURVIVAL *is dependant on knowledge absorption regarding how to*

- *overcome obstacles*
- *obtain success factors*

Knowledge can be acquired over time... a function of evolution

Or

ENTREPRENEURIAL ACTIONS *are risk reduction strategies which effect knowledge acquisition and address shortcomings...but*

these actions can backfire

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3 DOMAINS OF RISK

Customer & Resource Owners

OVERCOME
knowledge & resource shortcomings &
novelty perceptions

MARKET
Legitimacy by association

PRODUCTION
Product & process design

MANAGEMENT
Training and experience

11

Risk reduction strategies should transfer knowledge to internal and external stakeholders and reduce ignorance and verify legitimacy

LEGITIMACY *"a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate"*

Function of industry norms & ingrained rules

Perceptions of legitimacy on a 'micro' (task) and 'macro' (institutional form) level brings about support from internal and external actors and resource owners

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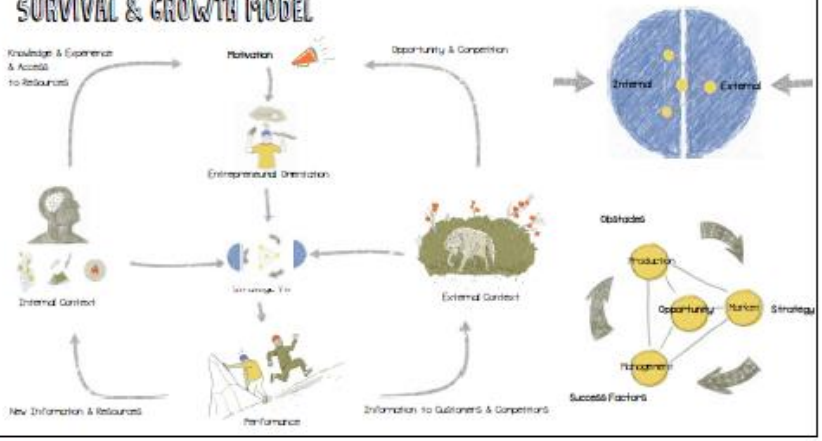
SURVIVAL & GROWTH MODEL



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GROWTH RARELY OCCURS BY CHANCE = *motivation*

Motivation subject to internal and external context

Motivation induces entrepreneurial actions to overcome obstacles, obtain success criteria & exploit an opportunity ~ bring about strategic fit

Degree of strategic fit determines performance which in turn provides more information to the internal & external contexts of the firm

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STRATEGY & STRATEGIC MANAGEMENT

Greek: "**Strategos**"
Meaning "art of the general"

*"The responsibility of a general is to **create positions which assure victory**"*
Sun Tzu ~ 515 BC

Identify & obtain sources of success

Remove & overcome sources of failure

15

NOT ENOUGH *to acquire success factors.....*
have to nullify sources of failure

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STRATEGY DIMENSIONS

Purpose	Context	Process	Content
			
Why is the strategy being formed?	Understand internal and external opportunities & obstacles	Knowledge how to effectively craft strategy	Ability to effectively communicate the strategy

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SUCCESSFUL STRATEGIES.....

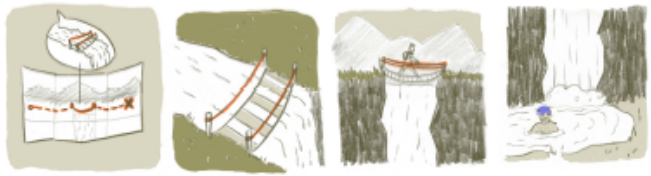
consider all 4 dimensions of strategy

18

STRATEGY FORMATION

Deliberate Strategy

From the Top Down



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OLDEST VIEW OF STRATEGY.....

consider the environment & where you want to be and craft a plan to be implemented

If it works = deliberate strategy

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STRATEGY FORMATION

21

PLANS DON'T ALWAYS WORK OUT

Knowledge may be incorrect or outdated

22

STRATEGY FORMATION

23

STRATEGIES MAY EMERGE OVER TIME...

despite or in the absence of plans as people follow a path of least resistance

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SUCCESSFUL STRATEGY FORMATION

Deliberate Strategy + Emerging Strategy

Combine planning & day-2-day

25

SUCCESSFUL STRATEGY FORMATION.....

combine planning & the views of employees from their day to day interactions

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STRATEGY PERSPECTIVES...

Viewpoints of how to approach strategy formulation ...1 to 5

Compete in **EXISTING** markets

Position Perspective

1

Resource Based

2

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POSITION PERSPECTIVE:

success a function of obtaining a favourable market position and keeping competition at bay

RESOURCE BASED PERSPECTIVE:

It's not what you do - it's how you do it. Source of success a function of internal capability

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STRATEGY PERSPECTIVES...

Viewpoints of how to approach strategy formulation ...1 to 5

Compete in NEW markets

Position Perspective 20

3

Blue Ocean

Resource Based

4

Dynamic Capabilities

Customer Based

5

29

BLUE OCEAN PERSPECTIVE:

Reduce the number of elements you compete on ~ provide the core customer need and make competition irrelevant

DYNAMIC CAPABILITIES:

Exploit your internal capability to always stay ahead

CUSTOMER PERSPECTIVE

In depth knowledge of the customer is your source of strategic advantage

30

STRATEGIES<>BUSINESS MODELS...

Strategies are brought to life by business models

STRATEGIC PATH

Impacts Upon

Supports

RESOURCES & ACTIVITIES

31

SUCCESSFUL STRATEGIES.....

must consider the micro-elements required to support the business path

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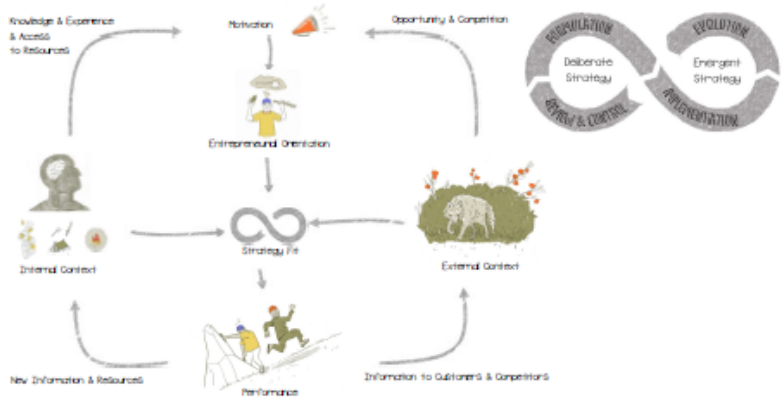
STRATEGY FORMATION MODEL



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SUCCESSFUL STRATEGY FORMATION.....

combine planning & emerging strategy perspectives

Institute actions which bring about knowledge in a repetitive fashion

34

VENTURE CAPITALISTS

When financial needs do not match Your abilities

Financiers have more than just money

Factor	Investment Criteria
Personality of Entrepreneur	VC Character Leadership Capabilities Commitment
Experience of Entrepreneur	Track Record Technical Qualifications Business Qualification
Product or Service	Innovativeness Patentability Unique Selling Proposition
Market Characteristics	Market Volume Market Growth Market Acceptance
Financial Characteristics	Fit to Investment Strategy Return on Investment Exit Possibilities

35

DECISION CRITERIA.....

Financiers value attributes negatively correlated to risk

- *motivation*
- *ability*
- *opportunity*
- *lack of competition*

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DELIBERATIVE STRATEGY FORMULATION

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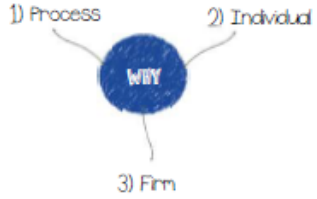
STRATEGY MODEL

- Purpose – at the core
- Bring about understanding & guides decision making



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WHY....

	PROCESS	INDIVIDUAL	FIRM
Requirement	Develop understanding	eStablish Motivation	Mission & Vision
Objective	Buy IN	Gauge motivation	Set Direction
Tools	Framework Explanation	Sharing personal stories	Brainstorming

39

WHY.... User Questions to consider

Process

Do you understand the role of the process and the elements that affect SME survival and growth?
Do you believe the right people who need to implement the strategy are present to help formulate it?
Do you understand the decision criteria that are reviewed by venture capitalists?

Individual

What do you wish to achieve for the firm and yourself?
Do you consider yourself as suitable for venture capital (external funding) and other forms of partnerships requiring the firm to be responsible and report to third parties?

Firm

What is the business the firm wishes to be in?
How is the firm different from rivals?
What should the perception of the firm be from the perspectives of internal and external stakeholders?

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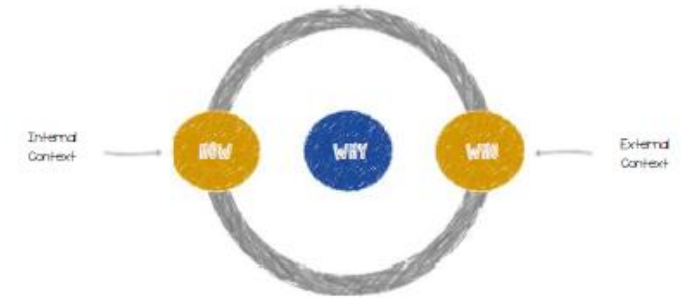
STRATEGY MODEL

Who ~ Identify a target customer
How ~ The means to execute upon the opportunity



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STRATEGY MODEL

Blue Ocean Principles
- Disconnect Value & cost
- Build Execution into strategy
- Make competition irrelevant

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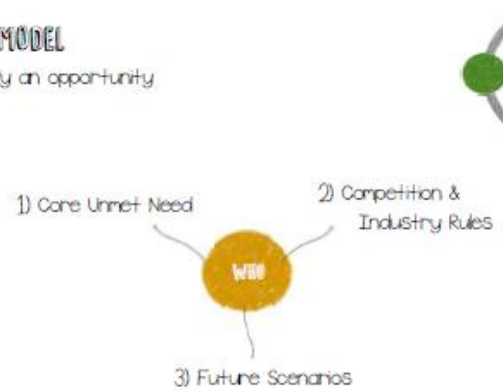
STRATEGY MODEL

Goal Identify an opportunity



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WHO...	CORE NEED	COMPETITION & INDUSTRY RULES	FUTURE SCENARIOS
Requirement	Establish unmet need	Identify competitive elements	Identify future impacts
Objective	Core value proposition	Favourable Competitive Environment	Explore Future Scenarios
Tools	Customer Empathy Map Customer Need Saturation Scale Customer Journey Map	Strategy Canvas SWOT Analysis	PEST Analysis Industry Life Cycle Map

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WHO....Questions to consider

Core Unmet Need

What are the engrained rules of the industry?
Who is an underserviced customer?
Who is the decision maker and who is the customer?
Does the intended customer pool and its growth present a significant opportunity to encourage mutually beneficial partnerships with third parties who can provide access to resources?

Competition

Who is or will be the firm's competitors?
What are the elements upon which firms currently compete?
How can the firm diverge from the industry norm?
What does the firm know that competitors do not?
Under what conditions will competitors be unable to compete with the firm?

Future Scenarios

What impact may future scenarios have on the industry and the firm?
What are the internal elements of the firm that will be affected by the external scenarios?

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STRATEGY MODEL

Goal: Overcome obstacles & obtain success criteria

1) Core Competency
2) Business Model
HOW
4) Growth Stage
3) Legitimacy

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HOW....

	CORE COMPETENCIES	BUSINESS MODEL	LEGITIMACY
Requirement	Establish core competency	Map the business model	Legitimacy Strategy
Objective	ID Core internal competitive advantage	Understand micro elements	Establish Legitimacy
Tools	Resource Pyramid of Value Creation	Business Model Canvas	Brainstorm

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HOW.... CONTINUED

	GROWTH STAGE
Requirement	Identify failure points
Objective	Sources of failure & mitigating measures
Tools	Greiner Growth Curve

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HOW....Questions to consider

Core Competency

What do we know about the core process of delivering value that our competitors do not?
Is the core process applicable to future opportunities and markets?
How can the firm exploit the core process to pursue future opportunities and markets?

Business Model

What are the success factors associated with delivering the intended value to the customer from a market, management and operational perspective?
What are the resource shortages and obstacles associated with the business model?
How can the firm negate or reduce the resource shortcomings and obstacles?
Under which circumstances will the measures in (3) increase the firm's risk of failure?
What is the isolating mechanism of the business model?
How can you ensure execution of the strategy via the business model?

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HOW CONTINUED....Questions to consider

Legitimacy

What is the object of legitimacy?
Who is the audience reviewing the legitimacy?
What is the purpose of the legitimacy?
How can the firm establish its legitimacy?

Growth Stage

What issues will present themselves as the firm grows in the short term?
What can we do to address these issues?
When will we address these issues?

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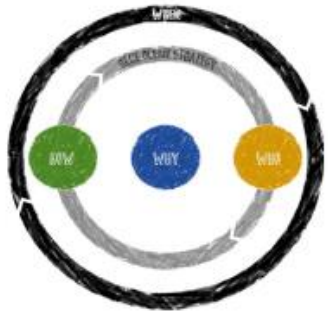
STRATEGY MODEL

Consider the validity of current and new information



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WHEN.....

Requirement	Explore Knowledge
Objective	Recognise truth & falsehoods
Tools	Reflective guided conversations

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WHEN....questions to consider

What do you believe to be the key assumptions that underpin your theories related to the opportunity and its effective execution?
How can you be confident the assumptions are true and correct?
How will you be able to recognise that it is necessary to alter your assumptions?

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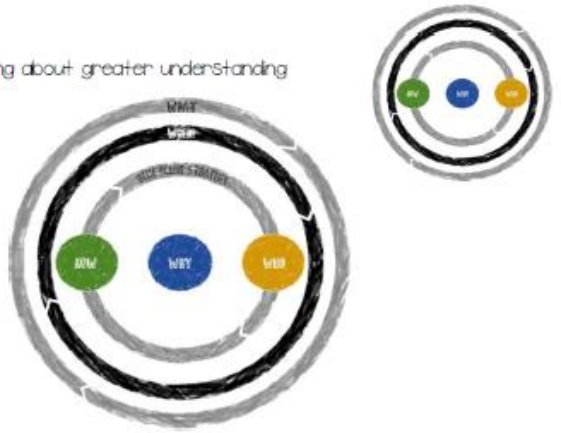
STRATEGY MODEL

Initiate actions to bring about greater understanding



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WHAT.....

Requirement	Identify actions
Objective	Bring about action
Tools	Effort-Impact Matrix

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WHAT....questions to consider

Which actions will have the greatest impact on confirming your assumptions regarding the business model?
Who will do what by when to bring new information to light regarding these assumptions?
How will you explain the strategy to the relevant stakeholders in an easily communicable fashion?

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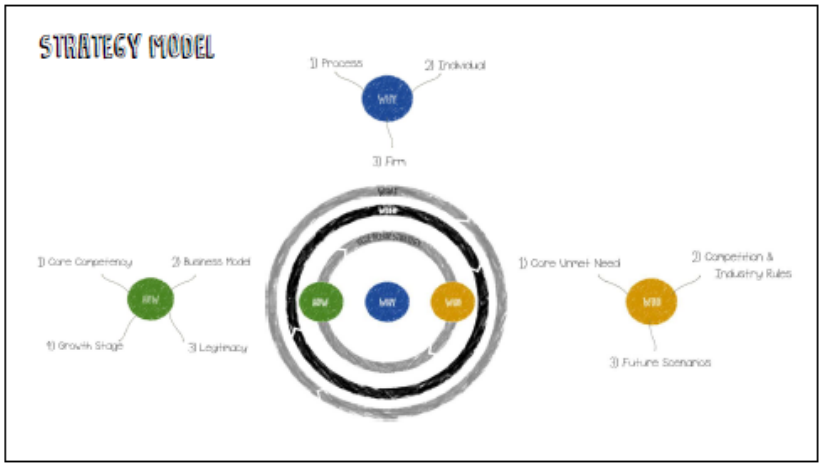

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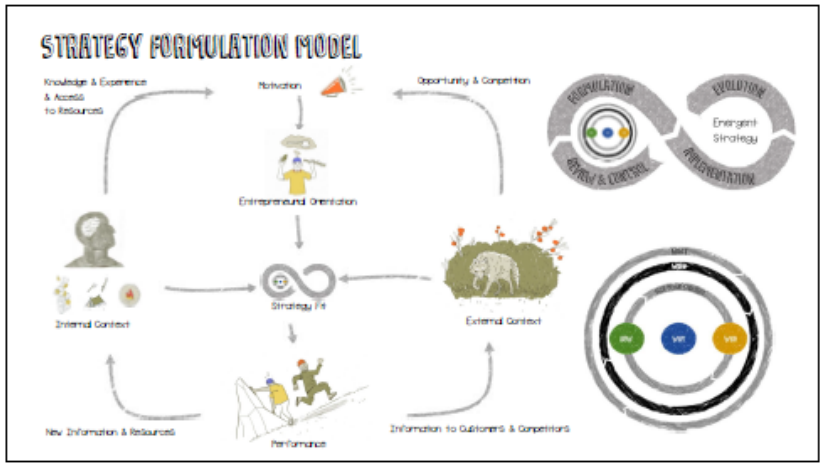

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VALIDATION QUESTIONS...

1) Do you believe the metaphor is suitably appropriate to bring about understanding regarding the framework?
2) Do you believe the metaphor brings about understanding with regard to the underlying theory?
3) Do you believe the inferred actions of the metaphor are aligned with the theoretical underpinnings of the framework?
4) Do you believe the suggested phases, stages and tools are suitable to achieve the desired outcomes?
5) Do you believe the metaphor and framework will guide an SME to formulate strategies which will improve their chances of survival and growth?
6) Do you believe that strategies formulated through the use of the framework have a higher probability of being funded by venture capitalists?

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